

INDEX OF AUTHORS.

ABSTRACTS A, 1939.

An asterisk denotes a previous abstract.

Anonymous, siphon with indicating meniscus and strengthened inlet and outlet arms, I, 282. All-glass flow-meter with interchangeable orifices, I, 390. Cathode-ray tube unit, I, 433. Aperiodic balance, I, 493. Colorimetric determination of iron and lead, using the Lovibond nessleriser, I, 578. Apparatus for ammonia distillation in Kjeldahl determinations, I, 582. The new ultramicroscope, I, 626. *Gonococcus* and gonococcal infections; report of committee for survey of research, III, 103. Short-wave therapy, III, 868.

A.

Aaltonen, K. E., findings in subjects over 80 years of age, III, 761.
 Aabaranel, A. See Rubinstein, H. S.
 Abbate, R., comparative effects of evipan, narconumal, eunarcon, pernocton, and rectidon on vasomotor reflexes, III, 507.
 See also Donatelli, L.
 Abbott, A. D. See Wright, K. A.
 Abbott, E. V., red rot of sugar-cane, III, 883.
 Abbott, W. O., intubation of the human small intestine, III, 592.
 Abd-el-Malek, S., sensory fibres in the ocular nerves, III, 30. Localisation of nerve centres of the extrinsic ocular muscles in the oculomotor nucleus, III, 30. Movements of the tongue in animals, with special reference to the cat, III, 111. Morphology of the human tongue, III, 345. Relation between the epiphysis cerebri and the reproductive system, III, 683.
 Abdalla, N. W., and McLeod, J. W., antigenic properties of streptolysin, III, 1103.
 Abderhalden, E., effect of fasting on defence enzyme reaction, III, 160. Fine structure of [plasma-]proteins as expression of physical inheritance, III, 653.
 and Abderhalden, R., differentiation of B_2 -avitaminosis and starvation, III, 164. Specificity of polypeptidases, III, 197. Acylase, III, 197. Reaction to acetylcholine of small intestine of pigeons suffering from vitamin- B_1 lack, III, 494.

Abderhalden, E., Abderhalden, R., Weidle, H., Baertich, E., and Morneweg, W., action of erepsin and trypsin on tetrapeptides derived from two molecules of glycine, one molecule of $l(+)$ -alanine, and one molecule of $l(-)$ -tyrosine, II, 63.
 and Hanson, H., polypeptidases in the lens, cornea, vitreous humour, and in the fluid from anterior and posterior chamber of the eye, III, 198.
 and Herre, W., application of the defence enzyme reaction [and plasma-protein specificity] to study of heredity, III, 232.
 and Schlenker, H., application of the defence enzyme reaction to diagnosis of carcinoma, III, 159.
 Abderhalden, R., sensitisation of central nervous system to pyrimidine components of aneurin, III, 602.
 See also Abderhalden, E.
 Abe, S., activity coefficient of strong electrolytes in concentrated solutions. II, I, 322.
 Abel, G., resistance of tubercle bacilli and acid-fast saprophytes against chemical agents, III, 877.
 Abel, J. J., Firor, W. M., and Chalian, W., tetanus. IX. Further evidence to show that tetanus toxin is not carried to central neurons by way of the axis cylinders of motor nerves, III, 333.
 Abelin, I., alcohol and diet, III, 764. Blood-silicic acid, III, 1029.
 Abelson, P., cleavage of the uranium nucleus, I, 234. Further products of uranium cleavage, I, 296. Identification of products of uranium cleavage, I, 350. Products of disintegration of uranium by neutrons, I, 504.
 Aber, K., organic sulphur compounds. IV. Action of hydrocyanic acid, ammonia, and hydrogen sulphide on carvone, II, 120.
 Abhyankar, V. S., Kotastane, W. V., and Narayana, N., proteins of *Bajri* (*Pennisetum typhoidum*), III, 1112.
 Abichandani, C. T., and Jatkari, S. K. K., metal-metal oxide electrodes. I. Tungsten and molybdenum electrodes, I, 29.

Abichandani, C. T., and Jatkari, S. K. K., differential titrations with tungsten electrode, I, 44. Automatic potentiometric titration apparatus, I, 44. Dissociation constants of *cis*- and *trans*-caronic and norpinic acids, I, 79. Dissociation constants of *o*-, *m*-, and *p*-hydroxybenzoic acids, gallic acid, pyrocatechol, resorcinol, quinol, pyrogallol, and phloroglucinol, I, 199.
 Abloy, A., basic cobalt trichloroacetate, I, 275.
 Abonnenc, L., diamagnetism of the rare gases of the air, argon, krypton, and xenon, I, 361.
 Abragam, D. See Deux, Y.
 Abraham, E. P., experiments relating to constitution of alloxazine-adenine dinucleotide, III, 624. Egg-white lysozyme, III, 721.
 Abrahamczik, E., determination of small amounts of heavy metals in natural waters, I, 218.
 and Blumel, F., micro-determination of halogens in organic substances using filter beakers, II, 94.
 Abrahamson, E. M., determination of blood-glucose with 2:6-dichlorophenol-indophenol, III, 451. Linear relation for calculating blood-sugars by the timed ferricyanide method, III, 653.
 Abratis, B., development and structure of zonula ciliaris, III, 806.
 Abramov, M. See Murtazaev, A.
 Abramov, M. M. See Lagerev, S. P.
 Abramova, M. A. See Nikitin, E. K.
 Abramowitz, A. A., similarity between hypophyseal chromatophorotropic hormone and chromatophorotropic hormone of the crustacean eyestalk, III, 259.
 and Abramowitz, R. K., specificity and related properties of the crustacean chromatophorotropic hormone, III, 676.
 Abramowitz, R. K. See Abramowitz, A. A.
 Abrams, H. See Muschat, M.
 Abrams, N. R., and Bauer, Walter, treatment of rheumatoid arthritis with vitamin-D, III, 292.
 Abrams, R. See Altschul, A. M.

- Abramson, D. I., Wassermann, P., and Senior, F. A., depressor effect of intact rabbit red blood cells in the dog, III, 227.
- Zazeela, H., and Marrus, J., plethysmographic studies of peripheral blood flow in man, III, 562.
- See also Friedman, B., Katz, L. N., and Prinzmetal, M.
- Abramson, D. S., electrocrystallisation of zinc on metallic surfaces, I, 374.
- Abramson, E., and Oigaard, H., dysaptation in schools at Djursholm, III, 675.
- Abramson, H. A., electrophoresis and electro-osmosis of drugs through the skin, III, 195.
- and Engel, M., skin reactions. II. Effect of allergic and histamine wheals on rate of absorption of dyes and blood from human cutis, III, 91.
- Furchgott, R. F., and Ponder, E., electrophoretic mobility of rabbit erythrocytes and ghosts, III, 550.
- and Gorin, M. H., skin reactions. VII. Relationship of skin permeability to electrophoresis of biologically active materials into the living human skin, III, 514. Contour gauge for measurement of height and breadth of allergic wheals, III, 618.
- and Ochs, I., micro-method for assay of histamine in mammalian blood, III, 357.
- Sookne, A. M., and Meyer, L. S., inactivation of ragweed pollen extracts by adsorption and electric charge of resultant surface, III, 935.
- Abramson, L., pernicious anaemia of pregnancy, III, 116.
- Abramson, M. B., and King, C. V., rate of solution of iron in acids, I, 571.
- Abrihat, M., separation and fractionation by froth flotation, III, 1020.
- and Dognon, A., measurement of surface tension by the static depolished plate method, I, 494.
- See also Dognon, A.
- Aborg, C. G. See Alexander, A. E.
- Abt, A. F., and Farmer, C. J., vitamin-C, III, 288.
- Accornero, F., histopathological researches on insulin shock, III, 131.
- Acevedo, H. J. See Bullrich, R. A.
- Achard, G., application of Poiseuille's law to suspensions of red corpuscles under different experimental conditions, III, 937.
- Acheson, G. H., topographical anatomy of the smooth muscle of the cat's nictitating membrane, III, 541.
- Achmatov, A., sorption of surface films of aliphatic compounds of high mol. wt. by a solid disperse phase. I. Use of two-dimensional manometry for sorption analysis; kinetics of sorption. II. Sorption isotherms; desorption, I, 73.
- Achmatowicz, O., and Mollowna, M., alkaloïds of *Nuphar luteum*, II, 525.
- and Raciński, B., structure of vomicine; exhaustive methylation of dihydrovomicine, II, 291.
- Achrap-Simonova, L. K., hydrolysis of zirconium chloride, I, 91.
- Achumov, E. I., solubility of solids in binary solvent mixtures. I and II, I, 607.
- Ackermann, D., histamine and anaphylaxis, III, 1005. Guanidine compound containing sulphur in nature, III, 1062.
- Ackermann, D., and Fuchs, H. G., occurrence of nicotinic acid in ox liver, III, 149. Basic constituents of pig's liver, III, 390. Occurrence of histamine and other bases in ox lung, III, 461. Occurrence of histamine in normal urine, III, 694.
- Fuchs, H. G., and Brandes, E., action of nicotinic acid in [pernicious] anaemia, III, 603.
- and Wasmuth, W., action of histamine, III, 777. Histamine and anaphylactic shock, III, 1005.
- Ackermann, J., histochemical studies on lipin and carotene content of the intestine of hibernating frogs, III, 148.
- Acquarone, M., chondro-epitrochlear muscle of Wood, III, 111. Langer's [muscular] arch in cadavers and living men, III, 111.
- Acree, E. G. See Meek, J. S.
- Acree, S. F. See Hughes, E. E.
- Adadurov, I. E., and Pevni, N. I., measurement of absorption of hydrogen by wires of platinum alloys, I, 413.
- Pevni, N. I., Rivlin, I. I., and Kushta, G. P., absorption of hydrogen by chromium, I, 519.
- and Prozorovski, N. A., effect of support on sintering of catalysts, I, 424.
- and Sedasheva, E. G., effect of internal field and polarisability of molecule on energy of activation, I, 424.
- Adair, F. L., Hesselstine, H. C., and Hac, L. R., behaviour of sulphanilamide, III, 176.
- See also Potter, E. L.
- Adair, G. S., protein molecule, III, 785.
- Adam, J. N. See Libby, R. L.
- Adam, N. K., Askew, F. A., and Pankhurst, K. G. A., interaction between adsorbed substances of simple constitution, and insoluble monolayers, I, 367.
- Adam, T. H. See Applebaum, E.
- Adamonis, F. See Hrynakowski, K.
- Adami, E., and Minioni, L., choleresis and endogenous purine metabolism; absence of effect of dehydrocholic acid on purine metabolism, III, 172.
- Adams, A. E., Granger, B., and Rhoades, R., stimulation of the thyroid gland of the guinea-pig by anuran anterior pituitary, III, 577.
- and Tukey, G., effect of administering frog anterior pituitary substance to immature female mice, III, 258.
- Adams, C. E. See Coleman, George H.
- Adams, C. O., chemical composition of transverse metaphyseal bands produced in growing bones by phosphorus ingestion, III, 283.
- Adams, H. E., and Rogers, H. E., viscosity of solutions of sulphur dioxide in organic liquids, I, 136.
- Adams, J. E. See Ergle, D. R.
- Adams, J. I., Benedetti-Pichler, A. A., and Bryant, J. T., confirmatory tests for lithium, sodium, potassium, caesium, strontium, and lead, I, 216.
- Adams, J. R., jun. See Drake, N. L.
- Adams, L. H., f.p.-solubility curves of hydrates and other compounds under pressure, I, 200.
- Adams, M., Power, M. H., and Boothby, W., metabolism in myasthenia gravis before and during administration of glycine, III, 172.
- See also Richtmyer, N. K.
- Adams, Mark H., and Nelson, J. M., nature of the enzyme tyrosinase, III, 98. Use of added protein in the determination of the activity of tyrosinase, III, 98.
- Adams, R., and Baker, B. R., structure of gossypol. XXI. Synthesis of 3:4-dimethoxy-2-isopropylbenzoic acid and of apogossypolic acid, II, 320.
- and Cairns, T. L., attempts to prepare optically active ethyleneimine derivatives containing an asymmetric nitrogen atom, II, 496. Stereochemistry of diphenyls. XLVI. 2-Substituted diphenyls, II, 505.
- and Dial, W. R., structure of gossypol. XXII. Gossypol ethers and their reduction products, II, 507.
- and Finger, G. C., stereochemistry of diphenyls. XLVII. 2:5-Di-m-4'-xylylquinols and their derivatives. XLIX. Comparison of the racemisation rates of the 2:2':6-nitrocarboxymethoxydiphenyls, II, 503, 547.
- and Geissman, T. A., structure of gossypol. XXIII. Attempts to prepare desapogossypolone tetramethyl ether; condensation of $\Delta^{8,9}$ -hexadiene with dibenzoyl ethylene, II, 508.
- Geissman, T. A., and Morris, R. C., structure of gossypol. XVI. Reduction products of gossypolone tetramethyl ether and gossypolonic acid tetramethyl ether. XVII. Nitration of gossypol hexamethyl ether, gossypolone tetramethyl ether, and gossypolonic acid tetramethyl ether, II, 77.
- and Gruber, E. E., lactone formation of the addition product of maleic anhydride and dicyclohexenyl, II, 21.
- and Hale, J. B., stereochemistry of diphenyls. XLVIII. Comparison of racemisation rates of three isomeric 2:2':6-nitrocarboxymethyldiphenyls, II, 547.
- and Hunt, M., structure of gossypol. XIX. Synthesis of 2:3-dihydroxy-4-isopropylbenzoic acid, II, 320.
- Hunt, M., and Baker, B. R., structure of gossypol. XX. Synthesis of 3:4-dihydroxy-5-isopropylbenzoic acid, II, 320.
- Hunt, M., and Morris, R. C., structure of gossypol. XVIII. Synthesis of 3:4-dimethoxy-5-isopropylaniline, II, 77.
- Long, P. H., and Jeanes, A., sulphanilamide derivatives. II, II, 500.
- Long, P. H., and Johanson, A. J., sulphanilamide derivatives. I, II, 500.
- Adams, W. E. See Escudero, L.
- Adams, W. L., gastric antacids, III, 931.
- Adamska, H., influence of the gonads on daily variations in weight of mice, III, 61.
- Adamson, D. W., syntheses of basic amino acids and glycine, II, 535.
- and Kenner, J., reactions of aliphatic diazo-compounds with carbonyl derivatives, II, 116.
- Adati, T. See Motida, N.
- Addens, J. L., presence of a nucleus of Bellonci in [thalamus of] reptiles and mammals, III, 371.
- Addicott, F. T., and Bonner, J., nicotinic acid and the growth of isolated pea roots, III, 341.
- Addis, T., metabolism of intraperitoneally injected serum-protein, III, 996.
- See also Poo, L. J., and Walter, F.

- Addison, C. C., "breaks" in interfacial tension curves, I, 609.
- Adel, A., rock-salt prismatic solar spectrum, I, 59. Origin of infra-red telluric absorption band q_2 , I, 59. Atmospheric absorption of infra-red solar radiation at the Lowell observatory. I, I, 239. New lines in rock-salt prismatic solar spectrum, I, 352. Interpretation of molecular spectra and study of molecular spectra in celestial objects. X. Spectroscopic studies of planetary atmospheres, I, 354.
- and Lampland, C. O., analysis of the infra-red limit of atmospheric transmission, I, 59.
- Adelhelm, E., cytological study of fatigued muscle, III, 25.
- Adelsköld, V., X-ray studies on magnetoplumbite, $PbO_6Fe_2O_3$, and other substances resembling " β -alumina," $Na_2O \cdot 11Al_2O_3$, I, 129.
- Adenski, A. D., acid-base changes in urine in various stages of decompensated heart disease, III, 487.
- Ades, H. W., Mettler, F. A., and Culler, E. A., effect of lesions in medial geniculate bodies on hearing in the cat, III, 570.
- See also Mettler, F. A.
- Adkins, H. See D'Ianni, J. D., Durland, J. R., and Rainey, J. L.
- Adler, A., and Finley, A. H., clinical results with Elsberg's olfactory test, III, 253.
- Adler, E., Euler, H. von, and Günther, Gunnar, dehydrogenases and iodoacetic acid, III, 195. Enzymic dismutation of aldehydes and dehydrogenation of alcohol, III, 422. Diaphorase I and II, III, 720.
- Euler, H. von, Günther, Gunnar, and Plass, M., flavin enzymes in the animal organism, III, 719. α -Citric dehydrogenase and glutamic acid synthesis in animal tissues, III, 786.
- See also Euler, H. von.
- Adler, E. L., treatment of gonococcal infections in children with sulphanilamide, III, 1080.
- Adler, F., development in time of chain reactions in a uraniferous mass, I, 504.
- and Halban, H. von, jun., control of chain reaction involved in fission of the uranium nucleus, I, 444.
- Adler, H., myasthenia gravis, Graves' disease, and thymus function, III, 748.
- Adlersberg, D., and Dolger, H., hypoglycemic reactions in diabetes, III, 681.
- and Ellenberg, M., effect of dietary fat and carbohydrate on uric acid excretion, III, 596.
- and Siegal, S., diet in prevention of diabetes mellitus, III, 500.
- Adloff, P., dentition of *Sinanthropus pekinensis*, III, 544.
- Adolf, A., attrition of teeth by use, III, 738.
- Adolph, E. F., measurements of water drinking in dogs, III, 760.
- and Dill, D. B., water metabolism in the desert, III, 175.
- Adolph, W. H., production of rickets in rats on diets containing oxalate, III, 705.
- and Liu, H. C., value of the sweet potato in human nutrition, III, 849.
- Wang, C. H., and Smith, A. H., effect of roughage on calcium balance in rats, III, 72.
- See also Knng, L. C.
- Adrian, E. D., localisation of activity in the brain, III, 469.
- and Ludwig, C., nervous discharges from olfactory organs of fish, III, 128.
- and Moruzzi, Giuseppe, high-frequency discharges from cerebral neurones, III, 572.
- Adriani, J., effects of anaesthetic drugs on rats treated with sulphanilamide, III, 928.
- Adrianopoulos, A., Feyel, P., and Jomain, J., renal function after unilateral decapsulation, III, 987.
- Adson, A. W., Moersson, F. P., and Kernohan, J. W., neurogenic tumours arising from the sacrum, III, 664.
- Ady, (Miss) P. See Farquharson, J.
- Aeschbacher, R. See Goldberg, M. W.
- Afanasiev, G. D., rare metal mineralisation in the S.E. part of mountainous Altai, I, 226.
- Afanasiev, S. K., Portnov, M. A., and Tschepelkin, J. N., potentiometric determination of small amounts of bromide, I, 37.
- See also Portnov, M. A.
- Afanasieva, A. S., effect of convallarin on seeds of summer wheat, III, 732.
- Afendulis, T. C., action of sodium chloride on gastric secretion, III, 387.
- and Gülzow, M., allergic-hyperergic gastritis, III, 62.
- See also Bartelheimer, H., and Gülzow, M.
- Aff Pacha, S. E., medical inspection and hygiene in schools and colleges of Egypt, III, 619.
- Agafonova, T. N., and Isküll, E. W., identity of Inder ascharite and camsellite, I, 436.
- Agar, J. N., and Bowden, F. P., kinetics of electrode reactions. I. and II., I, 202.
- Agduhr, E., internal secretion and resistance to injurious factors, III, 839.
- Ageze. See Olmer, J.
- Aggeler, P. M. See Lucia, S. P.
- Agliardi, N. See Venturello, G.
- Agner, K., injection of cupric chloride into rabbits poisoned by hydrocyanic acid, III, 416. Liver-catalase, III, 785.
- Agnew, W. G. See Johnson, J. A.
- Agnoli, R., and Bussa, D., toxic myocardiac action of uræmic serum, III, 119. Electrocardiographic changes in uræmia, III, 455. Humoral pathogenesis of cardiac disturbances at the menopause, III, 557. Cardiac action of folliculin and luteinising hormone, III, 587. Electrocardiographic changes in pulmonary infarction [in rabbits], III, 964. Protective factors in uræmic, myocardiac toxicosis, III, 965. Myocardiac toxicosis produced by serum of septicæmics, III, 965.
- and Crocetta, A., new technique for the melano-reaction, III, 209.
- and De Marchi, G., electrocardiographic changes due to uric acid, III, 122. Effect of experimental hyperglycæmia on electrocardiographic changes due to oxalic acid, III, 613. Electrocardiographic changes due to indole, tyramine, and tyrosine and to ammonia and guanidine, III, 964.
- Agostini, L., measurement of specific heats of gases using very small rates of gas flow, I, 388.
- Agranat, A. L., Dreosti, A. O., and Ordman, D., treatment of pneumonia with M. & B. 693, III, 503.
- Agre, C. L. See Smith, L. I.
- Agrell, S. O., adinoles of Dinas Head, Cornwall, I, 392.
- Agren, G., properties of secretin, III, 270. Preparation of cholecystokinin, III, 485.
- Hammarsten, E., and Rosdahl, K. G., disappearance of amino-nitrogen from cell-free liver extracts. II., III, 423.
- Agress, H., and Gray, S. H., histoplasmosis and reticuloendothelial hyperplasia, III, 1030.
- Agronomov, L. E., structure of boron hydrides. I. and II., I, 358, 599.
- Agruss, M. S. See Ayers, G. W., jun.
- Aguila, P. J. See Hermano, A. J.
- Aguzzi, A., dehydration of $Li_2O_2 \cdot H_2O_2 \cdot 3H_2O$, I, 209.
- Aharoni, J., determining e/m for medium high velocities, I, 544.
- Ahlberg, J. E., Lundberg, W. O., and Estermann, I., production of liquid hydrogen without use of a compressor, I, 105.
- Ahlberg, N., sedimentation rate of blood in Weil's disease, III, 813.
- Ahlborg, N. G., production of digestion leucocytosis in man by ingestion of amino-acids, III, 548.
- Ahlfeld, F., and Mosebach, R., brickerite, I, 392.
- Ahlgren, G., mechanism of physiological succinic acid oxidation, III, 196.
- Ahlm, C. E., and Brauns, F. E., sulphite cooking process. II. Reaction between thioglycolic acid and spruce lignin, II, 171.
- Ahlmark, A., and Kornerup, T. G., influence of anaesthetics on hydrolysis of acetylcholine in rabbit's blood, III, 654.
- Ahmad, B., and Gore, H. K., diet survey of 51 families of Ferozepore, Punjab, III, 161.
- Lal, R. B., and Roy, N. C., basal metabolism of healthy subjects under varying conditions of temperature and humidity, III, 170.
- and McCollum, E. V., cobalt content of food materials from different parts of the United States, III, 398.
- See also Lal, R. B.
- Aiazzi-Mancini, M., toxicity of ethylene and propylene glycols, III, 617.
- Aickin, R. G., Bayliss, N. S., and Rees, A. L. G., effect of solvents on the continuous absorption spectrum of bromine, I, 166.
- Aigner, A., vitamin-C and obstetrics, III, 75.
- Aihara, S., influence of homogentisic acid on oxidation of adrenaline through quinone, III, 140.
- Aird, I., behaviour of blood volume in intestinal obstruction and strangulation, III, 148.
- Airila, K., and Jalavisto, E., action of tonic neck reflexes on stretch sensations in arm and finger muscles, III, 1036.
- Airola, A., calculation of diffusion potentials, I, 84. Determination of activity coefficients, I, 144. Elimination of the diffusion potential, I, 147.
- Aitchison, J. D., pneumococcal meningitis treated with M. & B. 693, III, 928.
- Aitken, R. S., value of zinc-protamine-insulin in treatment, III, 50.
- Aitken, T. See Pierce, H. B.
- Aitkenhead, W. C., and Middleton, A. R., determination of germanium in minerals and solutions, I, 101.

- Aitoff, M., Arthus, A., and Dion, M., effect of potassium hydroxide and permanganate on the toxin of the dysentery bacillus from the new-born child, III, 1012.
- Aivazov, A. S. See Alexandrova, L. I.
- Aivazov, B. V., low-temperature oxidation of acetaldehyde, I, 31.
- Neuman, M. B., and Chanova, I. I., influence of admixtures on the induction period of cold and hot flames in butane, I, 205.
- Aizawa, K., carbohydrase. I. Enzymic hydrolysis of *p*-nitrophenylglucoside. II. Enzymic hydrolysis of *p*-nitrophenol- β -galactoside, III, 940, 1097.
- Aizenberg, A. A., oxidation-reduction processes in circulatory insufficiency, III, 459.
- Aizkovitch, M. A. See Salkind, J. S.
- Ajello, T., oxidation products of pyrrole amines. I. and III, II, 35, 519. Reactions with amyl nitrite. II, II, 445. Oximinopyrroles. XII. Transformation of the pyrrole into the pyrimidino nucleus, II, 519.
- and Cusmano, S., 3-acetylacoxazole. II. and III, II, 231, 454. Oximinopyrroles. XI. Transformation products of 3-oximino-2:5-dimethylpyrrole, II, 444.
- and Sigillò, G., oxidation products of pyrrole amines. II, II, 85. Reactions with amyl nitrite. I. and II, II, 209.
- Ajisaka, M. See Fujita, A.
- Ajolo, J. See Zernoff, V.
- Ajtai, M. See Szellédy, L.
- Akabori, S., and Kaneko, Takeo, synthesis of γ -methylthiolpropyl alcohol ("methionol"), II, 138.
- and Senoh, Y., synthesis of aromatic aldehydes, II, 372.
- Akagi, T. See Okamoto, K.
- Akahira, T., Kamazawa, M., and Tsumita, Y., temperature characteristics of dielectric losses at high frequencies, I, 452.
- Akasi, S., nucleic acid of typhoid bacillus of mice, III, 333. Preparation of pure mould-nucleic acid and its properties, III, 628. Fatty substance from typhoid bacillus of mice, III, 632. Metabolism of arginine by *B. coli*, III, 943.
- Akerberg, E., treatment of post-operative tetany, III, 975.
- Akerlof, G., and Kegeles, G., density of aqueous solutions of sodium hydroxide, I, 363.
- Åkesson, Å. See Theorell, H.
- Akimov, G. V. See Zaretzki, E. M.
- Akita, T., action of adrenaline on heart in hyperthyroidism, III, 578. Influence of autonomic drugs on action of adrenaline on the heart, III, 581.
- Akiyama, H. See Tamamushi, B.
- Akizuki, S., and Hosi, K., normal values of red cell sedimentation rate with regard to age and sex, III, 648.
- Akopian, A. N., preparation of esters from aqueous alcohols and acids in presence of aluminium chloride hexahydrate. II, II, 240.
- Åkos, V., action of vitamin-B₁ on epileptiform attacks during insulin shock treatment of schizophrenia, III, 250.
- Aksu, S. See Seyhan, M.
- Akune, T. See Hosoya, Y.
- Alacoque, P. See Chalier, J.
- Alam, M., Anrep, G. V., Barsoum, G. S., Talaat, M., and Wienginger, E., liberation of histamine from skeletal muscle by curare, III, 368.
- Alapeus, H. See Simola, P. E.
- Alapy, H., "tumour prophylaxis" by premedication with carcinogenic hydrocarbons, III, 160.
- Alaszewska, Z. See Krause, A.
- Albano, V. J. See Caldwell, B. P.
- Albath, W. See Heubner, W.
- Albaum, H. G., inhibitions due to growth-hormones in fern prothallia and sporophytes, III, 1018.
- Albeaux-Fernet, M. See Querido, A.
- Alber, H. K., hygroscopic substances in micro-analysis. I. New techniques for drying and weighing solids. II. Liquids, I, 223. Synthesis of organic compounds containing radioactive sulphur, II, 418.
- Albers, D., change of serum-phosphatase in cancer, III, 14. Serum-phosphatase in leukemia, III, 891.
- See also Hinsberg, K.
- Albers, H., importance of carbohydrates and minerals in metabolic disorders and toxemias of pregnancy, III, 283.
- Albers, M., serological diagnosis of cancer (Lehmann-Facijs), III, 991.
- Albers, V. M., and Knorr, H. V., visible absorption spectra of porphyrin and its isomeride, I, 58.
- Albert, Adolf. See Fischer, Hans.
- Albert, Adrien, detection of *m*-orientation in diamino-, dinitro-, and aminonitro-compounds, II, 309.
- Albert, A. H., and Klaus, E. J., changes in the heart in graded Valsalva experiments in athletes. II, III, 361.
- See also Klaus, E. J.
- Albert, O., and Eirich, F., relation between surface tension and internal heat of vaporisation, I, 11.
- See also Kailan, A.
- Albert, W. C., and Lowry, A., electrochemical reduction of furfural, II, 274.
- Albert, W. D. See Upson, F. W.
- Alberti, C., dulcine. V. Transformations of dulcine. VI. Pyrolysis of chloroacetyl- and of monobenzoyl-dulcine, II, 363.
- Albertini, A. con, aetiology of arteriosclerosis. I, III, 21.
- Albertson, W. E., analysis of materials by fluorescent methods, I, 486.
- Albrecht, A., erythroblastosis in new-borns, III, 351.
- Albrecht, G., absorption factor in crystal spectroscopy, I, 537.
- and Corey, R. B., crystal structure of glycine, I, 359.
- Albrecht, H., therapeutic use of sex hormones, III, 684.
- Albrecht, W., and Fellingner, K., dependance of growth on the pituitary and thyroid hormones, III, 258.
- Albrieux, A. S. See Fournier, J. C. M., and Morató-Manaro, J.
- Albright, F., Sulkowitch, H. W., and Bloomberg, E., comparison of the effects of vitamin-D, dihydrotachysterol (A.T. 10), and parathyroid extract on disordered metabolism of rickets, III, 403.
- See also Drake, T. G.
- Albright, P. S. See Wright, R. W.
- Albus, G., histaminase and choline-esterase activity in latent allergy, III, 860.
- and Morbel, W., action of ultra-violet rays on cutaneous reaction, III, 193.
- Alchazov, D. See Rukavishnikov, V.
- Alcock, . . O., chemistry of bacterial antigens, III, 634.
- and Otto, J. S., determination of formaldehyde in protein solutions: a new micro-method, III, 1113.
- Alcock, P., Berry, J. L., Daly, I. de B., and Narayana, B., action on perfused lungs of drugs injected into the bronchial vascular system, III, 126.
- Alder, A., familial changes of the granulation of white cells, III, 448.
- Alder, K., Rickert, H. F., and Windemuth, E., diene syntheses. X. Diene syntheses with $\alpha\beta$ -unsaturated nitro-derivatives, sulphones, and thioethers, II, 60.
- and Windemuth, E., diene synthesis. VIII. Simple method in the dicyclo-[1:2:3]-octane series. IX. 1:4:5:8-Diendimethylenedecahydronaphthalene, II, 13, 14.
- Alder, P., Buschke, W., and Gordonoff, T., toxicity of methyl alcohol, III, 91.
- Alderman, A. L., factor influencing the bilaterality of the eye rudiment in *Hyla regilla*, III, 443.
- Alderson, W. L., jun. See Milas, N. A.
- Aldinger, W. See Sauer, Eberhard.
- Aldis, B. C. See Parkes, G. D.
- Aldoschin, T. D., esters of organic acids from ethylenic hydrocarbons, II, 241.
- Aldrich, C. A., Stokes, J., Killingsworth, W. P., and McGuinness, A. C., concentrated human blood serum as a diuretic in the treatment of nephrosis, III, 312.
- Alechinsky, A., rôle of endotoxin in the Schwartzman reaction, III, 200. Schwartzman reaction produced by dead bacilli, III, 202. Haemorrhagic phenomena, III, 879.
- Alexa, M. See Radulescu, D.
- Alexa, V., analysis of mineral waters of the Sangiorz-Bai springs [Roumania], I, 628.
- Alexander, A. E., use of monolayer measurements for determining structures in aqueous media; ester and triazo-group, I, 182. Built-up films of unsaturated and substituted long-chain compounds, I, 367.
- and Teorell, T., films at the liquid/liquid interface. I. Experimental, I, 367.
- Teorell, T., and Åborg, C. G., films at the liquid/liquid interface. III. Specific effect of calcium ions on kephalin monolayers, I, 520.
- Alexander, E. A., and Tompkins, F. C., kinetics of oxidation of organic compounds by potassium permanganate. I. Cyclic compounds; 2:6-dinitrophenol, I, 570.
- Alexander, F. A. D. See Himwich, H. E.
- Alexander, G. L. See Biggart, J. H.
- Alexander, H., gold treatment of tuberculosis and chronic rheumatism, III, 779.
- See also Taylor, H. K.
- Alexander, H. E., type "B" anti-influenza rabbit serum for therapeutic purposes, III, 942.
- Alexander, L., and Looney, J. M., physicochemical properties of brain, especially in senile dementia and cerebral oedema, III, 470.
- PiJoan, M., Schube, P. G., and Moore, M., cevitamic acid content of blood plasma in alcoholic psychoses, III, 251.
- See also Doherty, M. M., Putnam, T. J., and Saks, A. L.
- Alexander, L. T., and Byers, H. G., hydrolysis of calcium feldspar, I, 109.

- Alexander, W., Duff, P., Haldane, J. B. S., Ives, G., and Renton, D., after effects of exposure to carbon dioxide, II, 1033.
- Alexander, W. O., copper-rich nickel-aluminium-copper alloys. II. Constitution of the copper-nickel-rich alloys, I, 314.
- Alexandrov, B., and Courtener, A., binary method for determination of the constants of radiation, I, 298.
- Alexandrov, V. G., and Alexandrova, O. G., anatomy of flower, fruit, and seed of peas, III, 339.
- Alexandrov, V. J. See Nasonov, D. N.
- Alexandrova, L. I., and Aivazov, A. S., vestibular disturbances following electric shock, III, 829.
- Alexandrova, O. G. See Alexandrov, V. G.
- Alexenko, A. S. See Primak, F. J.
- Alexeev, R. I., determination of mercury and silver in presence of other metals by means of diphenylthiocarbazon, I, 40. Colorimetric determination of molybdenum, using pyrogallol, I, 100.
- Alexeeva, E. A., and Andronikova, N. N., titration of ferrous iron with dichromate in presence of brucine indicator, I, 100.
- Alexeeva, E. N., structure of mixed polymeride of butadiene and acrylonitrile, II, 529.
- Alexeeva, K. See Veksler, V.
- Alexeeva, V. M. See Rusanov, A. K.
- Alexentzeva, E. S., changes in protein- and non-protein-nitrogen contents of parotid saliva during secretion, III, 841.
- Alewiijn, W. F., electrical vacuum regulator, I, 582.
- Alföldy, E., treatment of angioneurotic affections of the 8th nerve, III, 574.
- Alfvén, H., atomic nuclei in cosmic radiation, I, 236. Motion of cosmic rays in interstellar space, I, 236.
- Algostino, E., and Merciadri, A., increase in gaseous exchange due to injection of pilocarpine and sympatholytic drugs, III, 776.
- Alibrandi, A., active part played by the in-born afferent path in mechanism of conditioned reflexes, III, 33. Efficacy of the spoken word in elaboration of conditioned reflexes of winking in dogs, III, 130.
- See also Martino, G.
- Alichanov, A. I., and Berestezky, V., interpretation of β -disintegration data, I, 396.
- and Nikitin, S. J., β -ray spectrum of Ra-C and energy levels of excitation of Ra-C' nucleus, I, 170.
- See also Alichanov, A. I.
- Alichanov, A. I., Alichanov, A. and Kozodaev, M., measurement of e/m_0 for β -particles of Ra-C, I, 176.
- and Latishev, G., spectrum of Ra-C positrons, I, 169.
- Alicino, J. F., Pregl sulphur combustion of metallic compounds, II, 397.
- Alimarin, I. P., and Frid, B. I., quantitative separation of niobium and tantalum from titanium and zirconium, with the aid of pyrogallol, I, 158. Determination of niobium and tantalum with the aid of phenylarsinic acid, I, 158.
- Aliverti, G., charge of radium-A and of other short-life atoms resulting from radium emanation; significance of measurements by Gerdien's method, I, 171.
- Allaben, G. R., and Owen, S. E., adenocarcinoma of breast coincidental with strenuous endocrine therapy, III, 912.
- Allan, W., inheritance of peroneal atrophy, III, 826.
- Allara, E., interfollicular epithelium of the thyroid, III, 808.
- Allard, H. A., marsh gas in the ecology of peat bogs, I, 496.
- Allard, J., and Destriau, G., influence of the size of phosphorescent crystals on the radius of action of α -particles, I, 451.
- See also Quelet, R.
- Allchin, J. P. See Friend, J. N.
- Allegri, A., non-applicability of blood-sugar curve in avitaminotic pigeons to the assay of vitamin-containing products, III, 401.
- See also Porri, G.
- Alleman, R. S., dissipative acoustic reflexion coefficients in gases by ultrasonic interferometry, I, 188.
- Allen, B. E., and Henze, H. R., *tert*-alkyl primary amines, CRR'R''NH₂. I. Ethoxymethyldiallylcarbinylamine and analogues, II, 409.
- and Lingo, S. P. [with Felsing, W. A.], total and partial pressures of binary solutions of the butyl alcohols in benzene at 25°, I, 312.
- Wyatt, B. W., and Henze, H. R., catalytic hydrogenation of organic acids in alkaline solution, II, 241.
- Allen, C., paranoid psychosis with adrogenital virilism, III, 912.
- Allen, C. D., and Ragsdale, J. W., fibrin stones [in kidneys], III, 275.
- Allen, C. F. H., and Bell, A., β -nitrostyrene in the diene synthesis, II, 147.
- Eliot, C. G., and Bell, A., β -diphenyl- Δ^2 -butadiene, II, 253.
- Allen, C. W., Fraunhofer intensities in the infra-red region 8800—11,830 Å., I, 50.
- Allen, E., hyperplasia in the epithelium of the uterine tubes, III, 56. Ovarian hormones in relation to female genital cancer, III, 145.
- and Vespignani, P. M., active testicular epithelium in connective tissue surrounding a human adrenal gland, III, 442.
- See also Weinstein, L.
- Allen, E. K. See Allen, O. N.
- Allen, E. V. See Fetherree, T. J.
- Allen, F. See Brisbin, G. W. F.
- Allen, F. H., family relationships, III, 1022.
- Allen, F. M., tolerance and toxicity of insulin, III, 380, 681. Effects of ligations on nerves of the extremities, III, 665.
- and Rice, J. H., tolerance to and toxicity of insulin with spontaneous eating, III, 380.
- and Vicens, C. A., surgical treatment of experimental insulin poisoning, III, 582.
- Allen, J. F., and Ganz, E., influence of pressure on thermal conductivity of quid He II, I, 462.
- and Jones, H., liquid helium, I, 248.
- and Misener, A. D., properties of flow of liquid helium II, I, 558.
- and Reekie, J., momentum and heat flow in liquid helium II, I, 191. Forces associated with heat flow in helium II, I, 604.
- See also Barkenbus, C.
- Allen, J. G., and Short, C. L., granulocytopenia associated with sulphanilamide therapy, III, 410.
- See also Stewart, J. D.
- Allen, J. S., emission of secondary electron, from metals bombarded with protons, I, 230. Detection of single positive ions, electrons, and photons by a secondary electron multiplier, I, 395.
- See also Haxby, R. O.
- Allen, L. A. See Braz, M., and Hassouna, M. M.
- Allen, L. K., and Dallenbach, K. M., effect of light flashes during the course of dark adaptation, III, 254.
- Allen, N. M. See Moehlig, R. C.
- Allen, N. N., blood-fat of dairy cattle. I. Volumetric method for determination of blood-fat. II. Factors influencing fat content of blood plasma, III, 356.
- Allen, O. N., and Allen, E. K., root nodule bacteria of tropical leguminous plants. II. Cross-inoculation tests within the cowpea group, III, 873.
- Allen, P. J., and Goddard, D. R., respiration and powdery mildew of wheat, III, 1111.
- Allen, R. M. See Siegel, L.
- Allen, V. T. See Grim, R. E.
- Allen, W. D., and Hurst, C., scattering of D-D neutrons, I, 591.
- Allen, W. M., and Heckel, G. P., maintenance of pregnancy by progesterone in rabbits castrated on the 11th day, III, 480.
- See also Heckel, G. P.
- Aller, L. H., Baker, James G., and Menzel, D. H., physical processes in gaseous nebulae. VI. Equations of radiative transfer, I, 501.
- See also Baker, James G., and Menzel, D. H.
- Alles, G. A. See Hamilton, J. G.
- Alley, A., and Babkin, B. P., effect of histamine and pilocarpine on gastric secretion inhibited by fat, III, 386.
- Allibone, E. C., and Tunbridge, R. E., blood-sugar values following intravenous injection of glucose in man, III, 554.
- Allibone, T. E., and Meek, J. M., development of the spark discharge. II, I, 167.
- Alliger, G. See Hazlet, S. E.
- Alling, H. L., metasomatic origin of the Adirondack magnetite deposits, I, 498.
- Allington, W. B., separation of plant viruses by chemical means, III, 530.
- Allinne, M. See Halpern, B. N.
- Allinson, M. J. O. See Miller, B. F.
- Allison, F. E., Ludwig, C. A., Hoover, S. R., and Minor, F. W., legume nodule metabolism and nitrogen fixation, III, 1109.
- Allison, J. B. See Green, D. F.
- Allison, S. K., masses of ^6Li , ^7Li , ^9Be , ^{10}B , and ^{11}B , I, 292.
- Graves, (Miss) E. R., Skaggs, L. S., and Smith, N. M., *jun.*, mass difference $^9\text{Be} - ^8\text{Be}$; stability of ^9Be , I, 172.
- Skaggs, L. S., and Smith, N. M., *jun.*, energies released in the reactions $^7\text{Li} (p, \alpha) ^4\text{He}$ and $^6\text{Li} (d, \alpha) ^4\text{He}$, I, 506.
- Allmand, A. J. See Burrage, L. J., and Lizius, J. L.
- Allott, E. N., sodium and chlorine retention without renal disease, III, 693.
- Allport, N. L., and Moon, C. D. B., determination of traces of zinc in biological material and natural waters, I, 430.
- Allsopp, A., formation of oxalic acid by *Aspergillus niger*, III, 200.
- Almasy, F. See Krupski, A.
- Almazov, A. M. See Volkov, K. P.

- Almfelt, C. H., and McCrosky, C. R., apparatus for dispensing dry gaseous and liquid ammonia, I, 494.
- Almquist, H. J., and Klose, A. A., derivative of vitamin-K, II, 554. Isolation of vitamin-K as a choleic acid, III, 606. Determination of antihæmorrhagic vitamin [vitamin-K], III, 770. Colour reactions in vitamin-K concentrates, III, 853. Antihæmorrhagic activity of pure synthetic phthiocol, III, 853. Antihæmorrhagic activity of naphthaquinones, III, 923. Synthetic and natural antihæmorrhagic compounds, III, 996.
- and Mecchi, E., effect of bile on erosions of the chick gizzard lining, III, 77.
- Mecchi, E., and Klose, A. A., determination of the antihæmorrhagic vitamin, III, 77.
- See also Klose, A. A., and Lepkovsky, S.
- Alpern, D. E., [carbohydrate] metabolism in hyperergic reactions, III, 608.
- Alpers, B. J., and Dear, R. B., hemi-atrophy of brain, III, 831.
- and Yaskin, J. C., glioma of pons: clinical and pathological characteristics, III, 667.
- See also Strecker, E. A.
- Alpert, B., and Ferguson, E. A., local lipid atrophy and lipid dystrophy [after insulin], III, 680.
- Alphen, J. van, geometrical isomerism of indigotin, II, 229. Indigotin. IV. Diethoxyxalylindigotin and the geometrical isomerism of indigotin, II, 285. Aliphatic polyamines. VIII., II, 301.
- Alport, A. C., Ghaloungui, P., and Hanna, G., treatment of pellagra with nicotinamide, III, 402.
- Alsberg, C. L., structure of the starch granule, III, 216.
- Alsén, S., and Petré, T., capillaries of cerebellar cortex of guinea-pig, III, 823.
- Alstead, S., acid ammonium phosphate as a urinary acidifier, III, 154.
- Alsted, G., M. & B. 693 in type III pneumococcal pneumonia, III, 611.
- Alstine, H. E. van. See under Van Alstine, H. E.
- Alstodt, B. S., and Benedetti-Fichler, A. A., qualitative separations on a micro-scale; analysis of the tellurium and copper groups of A. A. Noyes and W. C. Bray, I, 429.
- Alt, H. L., relation of growth and nutrition to reticulocyte level in the young rat, III, 397. Iron deficiency in pregnant rats; its effect on the young, III, 1025.
- Chinn, H., and Farmer, C. J., plasma-ascorbic acid in patients with achlorhydria (pernicious and iron-deficiency anemia), III, 547.
- Altar, W. See Condon, E. U.
- Altberg, W., crystallisation of water. I., 1, 184.
- Alten, F., and Gottwick, R., relations between dry matter production in maize and elimination of carbon dioxide from the roots, III, 1016.
- and Hille, E., micro-determination of sugar in plant materials, III, 342.
- Altenburger, E., and Wendt, H., vitamin-A and the Reid Hunt reaction, III, 701.
- Althausen, T. L., Anderson, E. M., and Stockholm, M., effect of adrenalectomy and of sodium chloride on intestinal absorption of glucose, III, 977.
- and Stockholm, M., influence of the thyroid gland on absorption in the digestive tract, III, 40.
- Althaus, A. G. von, behaviour of amorphous and crystalline quartz in electrostatic field, I, 460.
- Altmann, M., and Hutt, F. B., influence of oestrogens in egg-yolk on avian blood-calcium, III, 263.
- Altnow, H. O., Van Winkle, C. C., and Cohen, S. S., renal amyloidosis, III, 486.
- Altschul, A. M., Abrams, R., and Hogness, T. R., soluble cytochrome c oxidase, III, 1008.
- and Hogness, T. R., hæmoglobin-oxygen equilibrium, III, 891.
- Sidwell, A. E., jun., and Hogness, T. R., preparation and properties of hæmoglobin, III, 229.
- Altschul, R., use of prostigmine in post-diphtheric paralysis, III, 84.
- Altschule, M. D. See Gilligan, D. R., and Iglauer, A.
- Altschuler, L. V., and Tzukunftman, V. A., simple method of preparing X-ray photographs of polished surfaces, using a camera obscura, I, 280.
- Alvarez, L. W., production of collimated beams of monochromatic neutrons in temperature range 300–10° K., I, 3.
- and Cornog, R., ³He in helium, I, 545.
- Helium and hydrogen of mass 3, I, 590.
- See also Green, G. K.
- Alvarez, W. C., new treatment for migraine, III, 619.
- Alvarez-Tostado, C. See Jameson, E.
- Alving, A. S., Rubin, J., and Miller, B. F., direct colorimetric determination of inulin in blood and urine, III, 540.
- See also Lewis, W. H., jun.
- Alwall, N., hypocytræmia after administration of salicylic acid, III, 89. Action of dinitrophenols on oxidation processes in animals, III, 294. Iodine therapy in hypertension and arteriosclerosis, III, 1092.
- Amagasa, M., Itô, K., and Nishizawa, K., sucrose and liquid ammonia. I. Vapour pressure of liquid ammonia solutions of sucrose, I, 419.
- Amaki, T., and Sugimoto, A., β -rays spectra of radioactive antimony and sodium, I, 233.
- Amaldi, E., and Fermi, E., groups of slow neutrons, I, 349.
- Amano, S. See Kiyono, K.
- Amat, M., and Duclaux, J., ultrafiltration. III, I, 224.
- Amati, A., effect of activated charcoal on biological inversion of sucrose solutions, III, 323.
- Ambache, N., and Barsoum, G. S., histamine released by isolated smooth muscles, III, 827.
- Ambelang, J. C., and Johnson, T. B., pyrimidines. CLX. Catalytic hydrogenation of 5- and 6-benzyluracils, II, 127. Ammonolysis of benzoylisonocyanodichloride [benzoylcarbylamine dichloride], II, 213.
- See also Johnson, T. B.
- Amberg, E. J. See Holmes, H. N.
- Amelin, A. G., appliance for analysis of aerosols, I, 105.
- Amelink, F., identification of chlorates, I, 156.
- American Heart Association. See Cardiac Soc. of Great Britain and Ireland.
- Amer. Medical Association, Council on Pharmacy and Chemistry, present status of immune globulin (human), III, 232. Myoston and map; use of so-called heart hormones in clinical medicine, III, 310.
- Amer. Medical Association, Council on Pharmacy and Chemistry, collodaurum, III, 414. Sulphapyridine, III, 858. Status of cyclopropane, III, 863. Present status of testosterone propionate: three brands, perandren, oreton, and neohombreol (Roche-organon), not acceptable for N.N.R., III, 913.
- Amer. Oil Chemists Society Committee on Indicators, report, I, 486.
- Ames, J. B. See Ratisch, H. D.
- Amick, H. C., slates of East Tennessee, I, 586.
- Amidon, E. L., hæmatologic studies in acute infections, III, 810.
- Amiel, J., paramagnetism of copper salts of normal fatty acids, I, 132.
- Amies, C. R., Carr, J. G., and Purdy, W. J., experiments on the des Ligneris fowl sarcoma, III, 489.
- Amiot, R., representation and interpretation of results relating to the adsorption by carbon of different classes of organic compounds, in aqueous solution, I, 414.
- Amir, M. See Viêles, P.
- Amis, E. S., and La Mer, V. K., entropies and energies of activation of ionic reactions; kinetics of the alkaline fading of bromophenol-blue in isodielectric media, I, 327. Gelation of bromophenol-blue, I, 563.
- Amiong, H. U., warm baths containing growth-promoting substances for rooting cuttings, III, 214.
- and Naundorf, G., significance of growth-substance in early fruiting, III, 214.
- Ammon, R. See Walter, G.
- Amole, C. V. See Lehman, E. P.
- Amoureux, G. See Berthelot, A.
- Amprino, R., structural alterations in human bones under mechanical stress, III, 223. Mechanical significance of collagenous fibres in human fibrocartilage, III, 444.
- Amreich, I., referred pain in gynaecological conditions, III, 583.
- Amsler, C. See Matschulan, G.
- Amuchástegui, S. B., effects of *Bothrops alternatus* venom on heart, III, 1086. Effect of cobra (*Naja tripudians*) venom on heart and circulatory dynamics, III, 1086.
- Amundsen, L. H., and Velitzkin, R., preparation of methylenaminoacetonitrile, II, 102.
- Amy, L. See Bayle, E.
- Anagnostidis, N. See Kastrop, H.
- Anand, B. M., and Narain, S., Raman effect in camphor, I, 509.
- Anantakrishnan, S. V., and Venkataraman, R., influence of substituents on additive reactivity of ethylene derivatives. IV. Mechanism of reaction, I, 206.
- Anel, P., and Lallemand, S., experimentally induced strophosomy in chickens, III, 643. Coelosomy produced in the chick embryo by colchicine, III, 956. Early diagnosis of strophosomy in chick embryo treated with colchicine, III, 956.
- Anderegg, P. See Hintzsche, E.
- Andersag, H. See Kuhn, R.
- Andersch, M. See Fay, M.
- Andersen, B., blood-catalase activity and hæmoglobin concentration in children, III, 13.
- Andersen, F., Geill, T., and Samuelsen, E., polycythæmia treated with Roentgen irradiation of the pylorus, III, 547.

- Andersen, O., effect of paraffin on absorption of vitamin-A, III, 702.
- Andersh, M. See Höber, R.
- Anderson, A. B. See Oastler, E. G., and Tompsett, S. L.
- Anderson, A. G. H., and Jette, E. R., X-ray investigation of the iron-chromium-silicon phase diagram, I, 138.
- Anderson, A. K., and Zipkin, L., free chlorine as source of error in blood-sugar determinations, III, 894.
- See also Kennedy, W. L.
- Anderson, B. E. See Friedman, H. B.
- Anderson, C. D., and Neddermeyer, S. H., mesotron (intermediate particle) as a name for new particles of intermediate mass, I, 55.
- Anderson, C. G., Haworth, W. N., Raistrick, H., and Stacey, M., polysaccharides synthesised by micro-organisms. IV. Molecular constitution of luteose, II, 143.
- and Mackie, T. J., cataphoresis experiments with sensitised erythrocytes, III, 1025.
- and Oag, R. K., effect of gastric mucin on pathogenicity of the meningococcus and other organisms, III, 794.
- Anderson, C. W. See Gunderson, N. O.
- Anderson, Ernest, Hechtman, J., and Seeley, M., hemicelluloses from cottonseed hulls, II, 10.
- Anderson, Evelyn, Haymaker, W., and Joseph, M., hormone and electrolyte studies of patients with hyperadrenocortical syndrome (Cushing's syndrome), III, 43.
- and Joseph, M., electrolyte excretion in rats maintained on low-sodium and low-potassium diets, III, 977.
- Urinary excretion of radioactive sodium and potassium in adrenalectomised rats with and without salt, III, 977.
- Anderson, E. L., effect of impingement dust sampling instruments on the dust particles, I, 224.
- Anderson, (Miss) Edith L., and Marrian, G. F., identification of equol as 7-hydroxy-3-p-hydroxyphenylchroman; synthesis of racemic equol methyl ether, II, 222.
- Anderson, E. M. See Althausen, T. L.
- Anderson, F. See Veibel, S.
- Anderson, G. M. See Shelling, D. H.
- Anderson, H. L., Booth, E. T., Dunning, J. R., Fermi, E., Glasoe, G. N., and Slack, F. G., fission of uranium, I, 235.
- and Fermi, E., simple capture of neutrons by uranium, I, 398.
- Fermi, E., and Hanstein, H. B., production of neutrons in uranium bombarded by neutrons, I, 294.
- Fermi, E., and Szilard, L., neutron production and absorption in uranium, I, 504.
- Anderson, J. A., and Ayre, C. A., varietal differences in barleys and malts. I. Nitrogen distribution among protein fractions of barley, III, 106.
- Anderson, J. S., molecular compounds— inorganic and organic, I, 482.
- Anderson, K. See Goodpasture, E. W.
- Anderson, L. P. See McGinty, D. A., and White, Julius.
- Anderson, P. A., contact difference of potential between barium and magnesium, I, 9.
- Anderson, R. B. See Bowley, H. H.
- Anderson, R. J., and Creighton, M. M., lipins of tubercle bacilli. LVII. Mycolic acids of avian tubercle bacillus wax, II, 404.
- Synthesis of phthiocol, II, 512.
- See also Cason, J., Geiger, W. B., jun., Salisbury, L. F., Stodola, F. H., and Wiegand, C. W.
- Anderson, R. S. See Johnson, F. H.
- Anderson, T., sulphanihamide in measles, III, 774.
- Cooper, E. D., Cairns, J. G., and Brown, D. R., sulphapyridine in pneumococcus (type II) pneumonia, III, 1081.
- Anderson, T. E. See Bowie, F. J. T.
- Anderson, T. F., and Dowdeswell, R. M., treatment of pneumonia with M. & B. 693, III, 503.
- Anderson, W. A. D., the renal lesion in hyperparathyroidism, III, 476.
- Hyperparathyroidism and renal disease, III, 579.
- Renal calcification in infancy and childhood, III, 595.
- Anderson, W. M. E., *Neisseria catarrhalis* isolated from the blood stream of a case of benign tertian malaria, III, 876.
- Anderson, W. S., progressive storage of starch in roots of the Triumph sweet potato during the growing season, III, 800.
- Anderssen, F. G., and Bathurst, A. C., nitrogen and phosphorus in oranges; nitrogen and phosphorus content and nitrogen phosphorus ratio of orange juice: relation to size of crop, III, 106.
- Andersson, A., pernicious anaemia and phlegmonous gastritis, III, 447.
- Andersson, G. See Enkvist, T.
- Andersson, K. J. I., refraction method for obtaining photographic records of concentration gradients, I, 433.
- Andervont, H. B., pulmonary tumours in mice. VI. Time of appearance of tumours induced in strain A mice following injection of 1:2:5:6-dibenzanthracene or 20-methylcholanthrene. VII. Further studies on the serial transmission of lung tumours occurring in inbred mice. VIII. Induction of pulmonary tumours in mice of strains D, M, C57 Brown, and C57 Black by 1:2:5:6-dibenzanthracene. IX. Induction of pulmonary tumours in strain A mice by injection of 2-amino-5-azotoluene or 3:4:5:6-dibenzcarbazole, III, 988.
- Occurrence of spontaneous and induced pulmonary and liver tumours in strain C₃H mice, III, 989.
- and McEleney, W. J., influence of foster nursing on incidence of spontaneous breast cancer in strain C₃H mice, III, 1063.
- and Shimkin, M. B., effect of ascorbic acid on haemorrhage produced by bacterial filtrate in transplanted tumours, III, 990.
- See also Nathanson, I. T.
- Andes, J. E., and Emerson, G. A., blood-guanidine after administration of convulsants, III, 89.
- and Northrup, D., photo-electric colorimetry. I. Determination of blood-iron and haemoglobin, III, 121.
- Photo-electric determination of blood-glucose and cholesterol, plasma-proteins, and urine-sugar, III, 357.
- See also Northrup, D.
- Ando, S., catalytic hydrogenation of phenol under high pressure. IV. and V., II, 146, 205.
- Ando, T., experimental production of liver cancer and diet, III, 70.
- Ando, Toshio, isodehydroergosterol as a component of isoneoergosterol, a molecular compound obtained from the pyrolysis of ergopinacone, II, 367.
- Photochemical dehydrogenation of ergosterol and 7-dehydrocholesterol, II, 477.
- Andrade, E. N. da C., and Dodd, C., effect of an electric field on viscosity of liquids, I, 191, 558.
- André, M. See Cornubert, R.
- Andreadis, T., and Toole, E. [with Binopulos, X., and Ziropoulos, J.], distribution of nicotine in the tobacco plant, III, 533.
- Andreas, J. M., inversion of a three-phase emulsion, I, 75.
- Hauser, E. A., and Tucker, W. B., boundary tension by pendant drops, I, 23.
- Andreasov, L. M., distribution of trichloroacetic acid between water and mixed organic solvents, I, 413.
- and Davidova, O. T., distribution of chloroacetic acids between contiguous liquid phases, I, 413.
- Andreassi, G., structural differences in spinal ganglion of man, III, 685.
- Effect of saline solutions on development of eggs of *Amblystoma*, III, 912.
- Andrée, H., heavy minerals from the older Upper Bavarian molasse, I, 438.
- Andreev, A. F., determination of vanadium, I, 42.
- Andreev, D. N., polymerisation of ethylene, propene, and Δ^4 -butene in still discharges, II, 295.
- Andreev, N. N., conditions of formation of hydrosols. II, I, 416.
- Andresen, M. I., and Mugraga, E. R., diameter and volume of red blood cells in infants and children, III, 741.
- See also Mugraga, E. R.
- Andress, K. R., and Wüst, K., sodium polyphosphates. II, I, 379.
- Andrew, G., rocks of high alkali content in Egypt, I, 500.
- Andrewes, C. H., occurrence of neutralising antibodies for Rous sarcoma virus in the sera of young "normal" chicks, III, 432.
- Immunity to influenza, III, 633.
- and Smith, W., effect of foreign tissue extracts on efficacy of influenza virus vaccines, III, 1105.
- Andrews, C. L., absorption of X-rays of wave-length $1.5 < \lambda < 8.3 \text{ \AA}$, I, 113.
- Andrews, D. H., Sanderson, J. A., and Hulburt, E. O., optical properties of evaporated films, I, 65.
- Andrews, G. C. See Schwartz, L.
- Andrews, H. L., new electrode for recording bioelectric potentials, III, 820.
- Andrews, J. C., and Andrews, K. C., administration of large doses of ascorbic acid and of methionine to cystinurics, III, 854.
- Andrews, J. S., effect of infestation with the nematode *Cooperia curticii* on the nutrition of lambs, III, 71.
- Andrews, K. C. See Andrews, J. C.
- Andrews, W. B. See Briscoe, C. F.
- Andrianov, K. A., and Kamenskaja, M., alkyl and aryl esters of orthosilicic acid. III. Synthesis of triethoxyallylmonosilane, II, 53.

- Andronikova, N. N. See Alexeeva, E. A.
- Andrus, E. C., and Wilcox, H. B., *jun.*, effects of anaphylaxis and histamine on coronary arteries in isolated heart, III, 746.
- Andrus, W. DeW. See Lord, J. W., *jun.*
- Angelescu, E., and Soloviu, E., velocity of adsorption on charcoal, I, 561.
- Angeletti, A., semi-micro-determination of sulphur in organic substances, II, 526.
- and Pirona, M., action of gaseous hydrogen chloride on 4-nitroso- α -naphthol and 4-nitrosoguaiacol, II, 58.
- Angenetter, H., and Verleger, H., dissymmetry of intensity in the light emission of neon and argon positive rays, I, 165.
- Angenot, P. See Charlier, R.
- Anger, V. See Christiani, A. F. von.
- Angerer, E. von, and Brand, J. O., photographic colorimetry of dark substances, I, 43.
- Angevine, D. M., differences in immunisation and sensitisation in rabbits injected with relatively avirulent or highly virulent cultures of the same strain (H) of hemolytic streptococcus, III, 527.
- Angus, T. C., dust control in industry, III, 94.
- See also Crowden, G. P.
- Angus, W. R., Raman spectra of terpenes, I, 122.
- Angyal, F. See Hábán, G.
- Anigstein, L., and Lawkowicz, W., strains of *Rickettsia* and *Proteus* cultivated from experimental typhus of the murine type, III, 429.
- Anissimova, V., experimental zinc teratomas of testis [of fowls] and their transplantation, III, 846.
- Annau, E., and Erdős, T., dehydrogenation of pyruvic acid, III, 111, 421.
- Année, P. See Le Grand, A.
- Anosov, V. J., and Ravitsch, G. B., relation between refraction coefficients of higher fatty acids, temperature, and their degree of unsaturation, I, 602.
- Anrep, G. V., Barsoum, G. S., Talaat, M., and Wieninger, E., determination of histamine in blood, III, 653. Distribution of histamine in blood, III, 817. Release of histamine by skeletal muscles, III, 900.
- See also Alam, M.
- Ansbacher, S., biological assay of vitamin-K, III, 1075.
- and Fernholz, E., simple compounds with vitamin-K activity, III, 923.
- See also Fernholz, E.
- Ansberry, M., effect on ability to discriminate between speech sounds by elimination of frequencies above 4000 cycles, III, 135.
- Anschütz, L., and Ungar, A., degree of association of metal diaryl ketals, II, 25.
- Anshur, A. G., dielectric properties of fused basalt, I, 404.
- Anslow, W. K., and Raistrick, H., action of alcoholic monomethylamine on derivatives of benzoquinone and toluquinone. I. Methoxy- and hydroxy-methoxy-derivatives, II, 511. Biochemistry of micro-organisms. LIX. Spinulosin (3:6-dihydroxy-4-methoxy-2:5-toluquinone), a metabolic product of a strain of *Aspergillus fumigatus*, Fresenius, III, 200.
- Anslow, W. P., *jun.* See Fruton, J. S.
- Anson, B. J., Beaton, L. E., and McVay, C. B., pyramidalis muscle, III, 441.
- and McVay, C. B., fossa ovalis, and related blood vessels, III, 441.
- See also Curtis, A. H., and McVay, C. B.
- Anson, M. L., reducing groups of ovalbumin, II, 526.
- Ansorge, J. See Hirt, A., and Sprockhoff, H.
- Ant-Wuorinen, J., wilkite and its chemical composition, II, I, 541.
- Ant-Wuorinen, O., constitution of cellulose with special regard to hydrolytic experiments, I, 511.
- Antener, I. See Werder, J., and Woker, G.
- Antes, S., and Molo, C., vitamin-C balance in patients suffering from tumours, III, 1071.
- Anthony, A. J., fate of neutral gases during respiration in a closed system, III, 365. Action of short-lived inhalation of oxygen on haemoglobin concentration and red cell count in man, II, III, 646.
- and Bechthold, K., diameter of human red cells during oxygen inhalation, III, 646.
- Anton, H., measurement and continuous registration of the temperature of the human skin, III, 94.
- and Elsasser, F., level of skin temperature of various parts of the body, especially the shoulder, in cooling experiments, III, 620.
- Antoniani, C., phosphorylation and molecular labilisation, III, 788.
- Antonino, G., therapeutic value of *Adonis cupaniana*, III, 862.
- Antonov, G., surface tension in different states of aggregation, I, 358.
- Antonov-Romanovski, V., influence of temperature on extinction of phosphors, I, 124.
- Antopol, W., and Robinson, H., urolithiasis and renal pathology after oral administration of sulphapyridine, III, 1000.
- See also Glick, D.
- Antropoff, A. von, adsorption of gases from low to high pressures, I, 72.
- Antweiler, H. J., streaming of electrolytes in reduction at the dropping mercury electrode. I.—III, I, 29, 84.
- Anxionnaz, R. See Maze, P.
- Anzalone, S. See Occhipinti, G.
- Anziani, P., velocity of formation of oximes in presence of buffers, I, 423. Velocity of formation of semicarbazones and of phenylhydrazones, I, 423.
- Anzilotti, W. F., and Vogt, R. R., alkylacetylenes and their derivatives. XXX. Preparation of α -alkyl- β -alkenylacetylenes, II, 197.
- Anzlinger, A. See Brock, J.
- Aoki, H., scattering of fast neutrons of different energy, I, 293.
- See also Kikuchi, Seishi.
- Aoki, K., immunisation by Aoki's receptors, III, 207.
- and Koizumi, K., toxic effect of the α and β receptors in *B. typhi-murium*, III, 432.
- Aoki, S. See Ito, T.
- Aoki, Y., antigenic functions of tubercle bacilli fractions, III, 104.
- Aoyama, S., and Itô, Tuneso, thermal expansion of nickel-copper alloys at low temperatures. I, I, 251.
- Apajalahti, A., can time of rupture of chorionic sac be independent of histological structure of foetal membranes? III, 587.
- Apitz, G., gold treatment of tuberculosis and chronic rheumatism, III, 779.
- Apitz, K., pathological physiology of blood coagulation, III, 117. Thrombosis and coagulation, III, 230. Bony changes in leukaemia, III, 648. Pathogenesis of hypophyseal dwarfism, III, 677. Formation of a colloid-like substance in sarcomata, III, 764. Profibrin. IV. Agglutination of thrombocytes by profibrin, III, 892.
- Apostolakis, C., and Savva, A., right aortic arch without dextrocardia but with a rare anomaly of the right lung, III, 442.
- Appel, G. See Haurowitz, F.
- Appel, H. See Keil, W.
- Appel, W., diurnal variations of eosinophils, III, 3. Biological properties of canavanine and deaminocanavanine, III, 1004.
- See also Reinhold, H.
- Appelbaum, E., chemotherapy in meningitis secondary to ear and sinus affections, III, 610.
- Apperly, F. L., variations in pulmonary vital capacity in health: daily, seasonal, and at moderate altitudes, III, 899.
- and Carey, M. K., mechanism of compensatory changes in anaemia, especially as regards blood-CO₂, and ν_{H_2} , III, 547.
- See also McConnell, J. S.
- Apperson, L. D. See Gilman, H.
- Applebaum, E., Grenz-ray studies of calcification of enamel, III, 155.
- and Adam, T. H., decalcification versus mechanical injury in caries, III, 155.
- Applebaum, H. S. See Young, A. M.
- Applebaum, M., and Frisbee, F. C., maintaining the potency of bacteriophage preparations stored for long periods of time, III, 1106.
- Appleyard, E. T. S., and Bristow, J. R., electrical conductivity of thin films of mercury, I, 555.
- Bristow, J. R., and London, H., variation of field penetration with temperature in a superconductor, I, 246.
- Bristow, J. R., London, H., and Misener, A. D., superconductivity of thin films. I. Mercury, I, 555.
- Appleyard, R., comprehensive fundamental electrical formula, I, 187.
- Apsey, G. R. M. See Jéques, E.
- Apte, Y. T., geology of Jamkhandi, Deccan, I, 437.
- Aradine, P. W. See Barnes, S. W.
- Aragona, G., Martino's sugar-raising (glucagetic) pancreatic hormone, III, 49.
- Arai, K., effect of diethylaminoethylphen-drine coumarincarboxylate, III, 712.
- Arakawa, S. See Yaoi, H.
- Aranovich, J., hypothalamus in Argentine fishes, III, 571.
- Arassimovitch, V. V., invertase activity in fruits of cucurbits, III, 871.
- Aravamuthachari, S., magnetic susceptibility of dilute sodium amalgams, I, 17.
- See also Rao, S. R.
- Arbatsky, I. W., titration theory of dilute solutions, I, 94. Nomogram for titration of carbonates, I, 540.
- Arbesman, C. See Eagle, H.

- Arbusov, B. A., cyclodehydration of substituted camphenilanol, II, 380. Isomerisation of terpene oxides. II. Isomerisation of α -pinene oxide in the Grignard reaction. III. Isomerisation of camphene, nopinene, and Δ^3 -carene oxides in the Reformatski reaction, II, 381.
- Arbusov, G. A. See Kostenko, A. S.
- Arcalidès, N. M., action of cardiazol on schizophrenic stupor, III, 187.
- Archarov, V., X-ray analysis, I, 43, 159.
- Archer, S. See Simons, J. H.
- Archibald, R. M. See Nicholson, T. F.
- Archipov, N. I., indicator of the level of liquids, with mechanical amplification, I, 160.
- Arcus, C. L., and Kenyon, J., mechanism of replacement reactions in allyl compounds: reactions of (+)-*n*-propylpropenylcarbinol and its derivatives, II, 45. Mechanism of the Hofmann reaction; retention of optical activity during the reaction with (+)hydrotropamide, II, 308.
- Ardagh, E. G. R., Bowman, W. H., and Weatherburn, A. S., reactions between thiophen and calcium hypochlorite solutions, I, 476.
- Ardenne, M. von, relation between image distortion in electron microscope and electron scattering in the object, I, 130. Performance of the electron shadow microscope, and an X-ray shadow microscope, I, 492. Intensity problems and resolving power of the electron microscope, I, 538.
- Ardoit, P. See Cahen, R.
- Arena, J. M., cerebral vascular lesions accompanying sickle-cell anaemia, III, 811.
- Arenas, N., and Sammartino, R., [gonads of the bitch], III, 380. Effect of castration and hypophysectomy on genital tract of bitches, III, 979. See also Sammartino, R.
- Aresu, P., antagonism between tubercular and neoplastic processes, III, 395. Effect of short waves on complement and haemolysins, III, 420.
- Argaud, R., and De Boissezon, J., osteogenesis in the carotids, III, 642.
- Arhimo, A. A., determination of small amounts of aspartic acid by the malic acid method of Pucher, II, 195. and Laine, T., determination of glutamic acid, II, 463. See also Virtanen, A. I.
- Ari, L. See Jeney, A. von.
- Arii, K., sorption of chlorine by active charcoal. III. Rate of sorption, I, 21. Kawabata, M., and Takai, T., sorption of phosphorus trichloride by active charcoal, I, 366.
- Arimoto, K. See Fujimaki, Y.
- Aring, C. D. See Spies, T. D.
- Ariyosi, A., oxidase in leucocytes, III, 348.
- Arkel, A. E. van, solutions and solubility, I, 20.
- Arley, N., theory of coincidence experiments on cosmic rays, I, 116.
- Arman, E. J., complex compounds $P(OH)_4ClO_4$ and $Se(OH)_4ClO_4$, I, 531.
- Arloing, F., Thévenot, L., and Vallier, J., histamine in experimental anaphylactic shock, III, 778. Effect of electric insulation on fermentation and culture growth, III, 794.
- Armbruster, (Miss) M. H., and Austin, J. B., adsorption of ethyl iodide on a plane surface of iron at 20°, I, 366.
- Armentano, L., reticulocyte count and scurvy, III, 167.
- Armenzoni, F. See Simonet, M.
- Arminio, J. See Wald, G.
- Armstrong, A. R., and Muirhead, D. R., sulphapyridine in blood of guinea-pigs after oral administration, III, 1083. Thompson, J. Lyndon, and Thomas, A. R., optimum dose of thuphanilamide for guinea-pigs, III, 927.
- Armstrong, C. W. J., Cleghorn, R. A., Fowler, J. L. A., and McVicar, G. A., stimulation of sympathetic nerves and injection of pressor drugs in adrenalectomised cats, III, 976.
- Armstrong, E. L., Coggin, C. B., and Hendrickson, H. S., spontaneous arteriovenous aneurisms of the thorax, III, 460.
- Armstrong, H. G., anoxia in aviation, III, 462. and Heim, J. W., effect of repeated daily exposures to anoxaemia, III, 462.
- Armstrong, R. T. See Stevens, P. G.
- Armytage, V. B. G. See Gayus, I. K.
- Arnauton, G. D., mechanism of action of radiant energy on the organism. II. Infra-red radiation, III, 1006.
- Arndt, F., and Eistert, B., constitutional conditions for mesomerism; stereomerism and mesomerism, I, 128. Tautomerism and mesomerism of the carbamyl group and their relation to light absorption; *o*- and *p*-hydroxyazo-compounds, II, 36. and Martius, C., supposed enolisation of cyclohexanone and other simple ketones, II, 376.
- Ozansoy, M., and Üstünyar, H., enolisation of pyruvic acid, II, 356.
- Arndt, H., treatment of extragenital disturbances with sex hormones, III, 481.
- Arneth, J., thrombocyte count in old age, III, 649.
- Arney, S. E., phosphate fractions in barley seedlings, III, 802.
- Arnold, A., and Elvehjem, C. A., influence of composition of diet on thiamin requirement of dogs, III, 1069. See also Stirn, F. E.
- Arnold, D. C., and Tinker, M. A., fixational pause of eyes, III, 1043.
- Arnold, H., thiocyno-derivatives of hydno-carpic and chaulmoogric acids, II, 368. See also Wagner-Jauregg, T.
- Arnold, L. See Hertel, H.
- Arnold, L. E. See Evans, K. L.
- Arnold, L. J. See Lorenz, A. J.
- Arnold, O., vasopressor and antidiuretic substance in urine, III, 844. Effect of diethylstilbestrol on bone marrow and blood of dog, III, 982. Grumbrecht, P., and Loeser, A., effects of intrauterine application of oestrogenic substances, III, 383.
- Arnold, R. See Voit, K.
- Arnold, R. chromatographic adsorption and dipoles, I, 467. Reaction between maleic anhydride and vinylhydrindenes, II, 412. and Collins, C. J., low-temperature dehydrogenation of hydroaromatic rings, II, 362. and Sprung, J., relation between resonance-stabilised chelate rings and acidity, II, 505.
- Arnot, F. L., and Becket, C., new process of negative-ion formation. IV., I, 2. and Hart, W. D., electron transfer in argon, I, 441. and M'Ewen, M. B., electron transfer in mercury vapour, I, 230. Formation of helium molecules. II., I, 348. See also M'Ewen, M. B.
- Arnott, W. M. See Thomson, S.
- Arnow, L. E. See Bernhart, F. W.
- Arntzen, C. E. See Price, C. C.
- Arnulf, A., Bernard, R., Cavassilas, D., and Déjardin, G., spectrum of the night sky in the ultra-violet region, I, 347.
- Aron, M., similarity between the specific properties of urine and blood, demonstrated by the same serological method, in cancer, tuberculosis, and syphilis, III, 206. Conditions of specificity of the serological reaction for cancer, III, 991. and Kayser, C., thermal adaptation and thyroid function, III, 579. See also Buck, F., and Kayser, C.
- Aron, R., specific properties of urine and serum in syphilis demonstrated by a serological reaction, III, 206.
- Arons, P. See Rijst, M. P. J. van der.
- Aronsohn, H. G., and Hudson, J. E., determination of pigment in gallstones, III, 273. See also Phemister, D. B.
- Arragon, G. See Khouvine, (Mme.) Y.
- Arreghini, E. See Rollier, M. A.
- Arrhenius, S., dielectric properties of carbon monoxide-haemoglobin solutions mixed with foreign substances, I, 516.
- Arrowsmith, W. R. See Moore, C. V.
- Arroyo, R. See Owen, W. L.
- Arthus, A. See Aitoff, M., and Lourau, M.
- Artom, C., Sarzana, G., and Segré, E., influence of food fat on formation of phospholipins in animal tissues, III, 283.
- Artz, L. C., occurrence of wavellite at Giles Co., Virginia, I, 110.
- Artzimovitch, L. A., and Chramov, V. A., energy losses of fast electrons, I, 394.
- Aruja, E., and Perlitz, H., lattice constant of sodium, I, 243. See also Perlitz, H.
- Arvanitaki, A., character of local electric response in the isolated axon of *Sepia*, III, 664. and Cardot, H., four types of response to galvanic stimulation of the myocardium of the snail, III, 235.
- Arzichovskaja, E. V., and Spiridonova, N. S., enzymic system of peas, III, 940.
- Asada, T., Okuda, T., Ogata, K., and Yoshimoto, S., masses of ^{12}C and ^{14}N , I, 442.
- Asada, Y., alunite. VI., I, 332.
- Asahina, Y., and Hiraiwa, M., lichen substances. XCIII. Thamnic acid, II, 424. and Kawahata, H., action of sulphuric acid on camphenecarboxylic acids, II, 483. and Sakurai, Y., gentiopicroin. II., II, 469. and Shibata, S., lichen substances. XCII. Psoromic acid. XCIV. Occurrence of telephoric acid in lichens, II, 441, 479.
- Simosato, Z., and Sakurai, Y., lichen substances. XC. Orcinoldicarboxylic acid monomethyl ethers and the non-existence of the so-called isosquamatic acid, II, 67.

- Asahina, and Yanagita, M., lichen substances. LXXXIX. and XCI. Usnic acid, II, 32, 371.
- Asai, I. See Okinaka, S.
- Asakawa, H., action of drugs on Ehrlich's line, III, 37.
- Asana, R. D., relation between distribution of auxin in the tip of the *Avena* coleoptile and first negative phototropic curvature, III, 341.
- Asano, J., and Sato, Tatsuo, micro-determination of urine-urea in 0.1 c.c. or smaller amounts, III, 276.
- Asano, M., and Azumi, T., constitution of nephromopsis acid. II, II, 97. Constituents of *Cetraria pseudocomplicata* and *Nephromopsis ciliatilis*, III, 884.
- and Fujiwara, S., lichen pigments of the pulvinic acid series. V. Synthesis of *m*-hydroxypulvinic anhydride, II, 438.
- Aschaffenburg, R., gold sol test for bovine mastitis, III, 727.
- Ascham, L., Spiers, M., and Maddox, D., availability of iron in various foods, III, 284.
- Aschenbrenner, R., optimal digitalis therapy in heart disease, III, 309.
- Ascher, L., immunity and resistance to tuberculosis, III, 1103.
- Ascher, M. S. See Waldbott, G. L.
- Asehheim, S., Portes, L., and Mayer, M., role of gonadotropic hormones in physiology and pathology of ovary, III, 1045. Hypophyseal gonadotropic therapy, III, 1045.
- and Varangot, J., effect of testosterone propionate on ovary of adult rat, III, 754.
- Aschkinazi, J. B., continuous-action laboratory steam generator, I, 160. Colour reaction for polyhydric phenols, II, 464.
- Aschkinazi, M. S., and Kurnosova, P. V., Raman effect of sulphuric acid solutions in methyl and ethyl alcohol, I, 58. See also Kurnosova, P. V.
- Aschner, B. See Bauer, J.
- Aschoff, L., arterio-venous anastomoses in man and animal, III, 20. Thrombosis and embolism, III, 117. Bile constituents for which the liver is a secretory or excretory organ, III, 273. Pituitary gland in anthropoids, III, 575. Origin of chronic gastric ulcers, III, 592.
- Ascoli, A., and Bassi, A., attenuation of granuloma-producing bacteria by bile and their use as vaccines, III, 1014.
- Ascroft, P. B., surgical treatment of arterial hypertension, III, 1032.
- Asdell, S. A. See Brody, S.
- Asendorf, E. See Emmert, B.
- Ash, R., Wolman, I. J., and Bromer, R. S., diagnosis of congenital cardiac defects in infancy, III, 1031.
- Ashburn, H. G., Collett, A. R., and Lazzell, C. L., β -alkoxyethyl esters of chlorocarbonic and carbamic acids, II, 47.
- Ashburn, L. L., new bone formation in primary carcinoma of prostate gland, III, 1021.
- See also Hornibrook, J. W.
- Ashby, G. K., simple inexpensive turbidimeter, I, 339.
- Ashe, W. F. See Spies, T. D.
- Asher, C. See Hartmann, A. F.
- Asher, L., regulating action of hormones, III, 754.
- Ashford, C. A. See Wilkinson, J. F.
- Ashford, G. L. See Robertson, W. M. F.
- Ashford, T. A. See Rosenbaum, E. J.
- Ashikari, H., bile of "akajei" fish (*Dasyatis akajei*) and the constitution of scymnol, III, 692.
- Kim, C. H., and Sihm, T. S., composition of bile of the kawahagi and of the mebaru fish, III, 66.
- Ashkenaz, D. M., nerve impulse frequency and its relation to vasomotor reflexes, III, 457. Stimulation of sensory somatic nerves in relation to the visceropannicular reflex, III, 901.
- Ashley, C. See Hamblen, E. C.
- Ashley, J. N., Raistrick, H., and Richards, T., biochemistry of micro-organisms. LXII. Crystalline colouring matters of species in the *Aspergillus glaucus* series. II, II, 433.
- Ashley, S. E. Q., spectrophotometric methods in modern analytical chemistry, I, 221.
- Ashley-Montagu, M. F., trimethylamine in menstruating women, III, 263.
- Ashman, R., normal duration of *Q-T* interval, III, 895.
- and Hidden, E. H., rightward deviation of axis of *T* wave, III, 655.
- Ashmead, J., specific heat of copper sulphate below 1° K., I, 461.
- Ashton, F. L., control of the cyanogen bands of the graphite arc, when determining chromium spectrographically in plant material, III, 804.
- Ashworth, J. R., ultra-violet rays and the solar cycle, I, 508.
- Ashworth, M. R. F., Daffern, R. P., and Hammick, D. L., mechanism of decarboxylation. II. Production of cyanide-like ions from α -picolinic, quin-aldinic, and isoquinaldinic acids, II, 342.
- Asinger, F., substitution of aromatic hydrocarbons, II, 147.
- Ask-Upmark, E., parathyroids and body temperature, III, 137. Osteomalacia hepatica, III, 692.
- Askanazy, M., cephalic communication of umbilical vessels, III, 738.
- Askew, F. A. See Adam, N. K.
- Aslett, E. A., Hart, P. D'A., and Michael, J., lung volume and its subdivisions in normal males, III, 461.
- Asmundson, V. S., Gunn, C. A., and Klose, A. A., response of the immature female fowl to injections of mare gonadotropic hormone and oestrin, III, 58.
- See also Gregory, P. W.
- Asmus, E., viscosity of aqueous solutions of strong electrolytes of high ionic valency, I, 364.
- Asmussen, E., and Christensen, E. H., influence of blood distribution on circulation during exercise, III, 1031. Mean capacity of the lungs during increases oxygen want, III, 1033.
- Christensen, E. H., and Nielsen, M., pulse rate and posture, III, 456. Influence of posture on pulse rate during exercise, III, 456. Regulation of blood pressure in different postures, III, 456. Circulatory insufficiency in upright posture with normal blood pressure and diminished heart minute volume, III, 457. Oxygen consumption of skeletal muscle at rest and during exercise, III, 1033.
- Christensen, E. H., and Sjostrand, T., dependence of lung volume on blood distribution, III, 1033.
- Aso, K., decomposition products of substances containing uronic acid by heating in autoclave. II. Reduction of dimethylalginetin, II, 173. Synthesis of bis-(5-hydroxymethylfurfurylacrylic acid) ether, II, 173. Synthesis of 3:8-dimethoxyflavone, II, 175. Formation of 2:5-dihydroxypyridine by the action of hydroxylamine on furfuraldehyde, II, 386. Products of heating furfuraldehyde and hydrazine sulphate in an autoclave, II, 387. Formation of 5-hydroxy-2-methylpyridine by the action of ammonium sulphate on 5-methylfurfuraldehyde, II, 387. Formation of β -hydroxypyridine derivatives from hexoses and ammonium salts. I, II, 486. Isolation of 3-hydroxypyridine from hydrolysis products of algae with acids under pressure; mechanism of formation, III, 884.
- Migita, M., and Ihda, T., mechanism of nitrogen utilisation by *Azotobacter*, III, 1099.
- Aspinall, S. R. See Hill, A. J.
- Assarsson, A. See Cohn, G.
- Assmann, H., toxic damage to the liver, III, 272. Toxic action of nicotine, III, 510.
- Astapovitch, I. S., meteoric falls in the U.S.S.R., I, 284.
- Astaschenko, K. I., and Moleva, V. A., zunyite and zunyite rock of Karabas, I, 436.
- Astbury, W. T., protein molecule, III, 785.
- and Bell, (Miss) F. O., structure of proteins, II, 293.
- Asteriades, cure of post-operative ileus by spinal anaesthesia, III, 63.
- Aston, F. W., discrepancies in the isotopic weight of ^{12}C , I, 442.
- Bohr, N., Hahn, O., Harkins, W. D., Mulliken, R. S., and Oliphant, M. L., international table of stable isotopes for 1939, I, 503.
- Aston, J. G., and Eidinoff, M. L., low-temperature precision adiabatic calorimeter adapted to condensed gases from 10° K. to room temperature, I, 490.
- Eidinoff, M. L., and Forster, W. S., heat capacity and entropy, heats of fusion and vaporisation, and the vapour pressure of dimethylamine, I, 461.
- See also Sutherland, L. H., and Young, G. H.
- Astrachan, G. D., and Sharp, E. A., value of liver to patients intolerant to arsenicals, III, 510.
- Astruc, A., Giroux, J., and Barthe, A., modification of Astruc's apparatus for hot extraction, I, 224.
- Astrup, I. See Astrup, T.
- Astrup, T., and Astrup, I., effect of inhibitory substances on time law of blood coagulation, III, 649.
- and Jensen, H. B., purification of heparin, III, 10.
- See also Fischer, Albert, and Hauowitz, F.
- Astwood, E. B., changes in weight and water content of uterus of normal adult rat, III, 1053. Assay method for progesterone based on decidual reaction in rat, III, 1056.
- and Greep, R. O., nomenclature of gonad-stimulating hormones of placental origin, III, 480.

- Asvatsaturov, *M. L.*, problem of pain, III, 569.
- Aten, *A. H. W.*, solubility of electrolytes, I, 80. Objective colorimetry, I, 580.
- and Hevesy, *G.*, diffusion of phosphate ions into blood corpuscles, III, 115. Fate of the sulphate radical in the animal body, III, 302.
- Aten, *A. H. W., jun.*, nuclear packing effects, I, 351. Artificial radioactive substances as indicators, III, 1079.
- Bakker, *C. J.*, and Heyn, *F. A.*, transmutation of thorium by neutrons, I, 399.
- See also Heyn, *F. A.*
- Athanasu, *G.*, photo-electric effect and photo-electric conductivity in semiconductor crystals, I, 356.
- Athavale, *V. T.* See Datar, *D. S.*
- Atkeson, *W. J.* See Whitnah, *C. H.*
- Atkin, *L.*, Schultz, *A. S.*, and Frey, *C. N.*, ultramicro-determination of thiamine by fermentation method, III, 920.
- See also Light, *R. F.*, and Schultz, *A. S.*
- Atkin, *W. R.* See Gordon, *J.*
- Atkins, *B. E.*, Bastick, *R. E.*, and Ibbs, *T. L.*, thermal diffusion in mixtures of the inert gases, I, 516.
- Atkinson, *A. J.* See Culmer, *C. U.*
- Atkinson, *E. R.*, and Hughes, *A. H.*, "Coleum Philosophorum" of Philipp Ulstad, I, 434.
- Atkinson, *F. R. B.*, chloroma in children, III, 812. Still's disease, III, 1061.
- Atkinson, *G. H.* See Brindley, *G. W.*
- Atkinson, *J. R.*, Campbell, *N. R.*, Palmer, *E. H.*, and Winch, *G. T.*, accuracy of rectifier photo-electric cells, I, 43.
- Atkinson, *R. G.* See Barrow, *F.*
- Atlas, *L. N.*, aetiology of vasomotor and nutritional changes following peripheral nerve section, III, 238. Oscillometry in arteriosclerosis, III, 823.
- Atlas, *M.*, rate of oxygen consumption of frogs during embryonic development and growth, III, 346.
- Atoda, *T.* See Ishikawa, *F.*
- Atroschtschenko, *V. I.*, kinetics of absorption of oxides of nitrogen by alkaline solutions, I, 477.
- Atsuki, *K.*, and Takada, *T.*, xanthates. I. Reactions of xanthic acids with metallic [salts], II, 532.
- Atta, *F. A. van.* See under Van Atta.
- Atwell, *W. J.*, morphogenesis of the hypophysis cerebri of the domestic fowl during the second and third weeks of incubation, III, 443.
- and Zoltowski, *P.*, case of left superior vena cava without a corresponding vessel on the right side, III, 642.
- Atzler, *E.*, industrial physiology. II, III, 419.
- Aub, *J. C.*, report on medical progress; endocrinology, III, 972.
- See also Nathanson, *I. T.*
- Aubel, *E.*, anaerobic oxidation of reduced cytochrome-C by *B. coli* in presence of nitrate, III, 98. Eau et sels; [water and salts], III, 175. Biological hydrogenation, III, 1100.
- and Houget, *J.*, utilisation of oxygen by a strict anaerobe, *Clostridium butyricum*, III, 1011.
- Aubert, *H.* See Iliescu, *C.*
- Aubert, *M.*, and Gheorghiu, *T. D.*, influence of temperature on ultra-violet absorption of benzene, I, 299.
- Aubertin, *E.*, Lacoste, *A.*, and Saric, *R.*, disturbances in glycoregulation following section of pancreatic duct, III, 772. Glycoregulatory function of spleen, III, 772.
- Servantie, *L.*, and Chassagnette, *C.*, hypoglycæmic action of insulin precipitated with zinc hydroxide, III, 910.
- Aubry, *M.*, adsorption phenomena at interfaces, I, 467.
- Olivier, *H.*, and Oumikov, *S.*, ionisation into the car of salts of choline, III, 38.
- See also Mèrigoux, *R.*
- Auchter, *E. C.*, interrelation of soils and plant, animal, and human nutrition, III, 700.
- Audrieth, *L. F.*, and Kleinberg, *J.*, acid catalysis in liquid ammonia. III. Effect of α -substituents on the ammonolysis of esters, II, 217.
- See also Butler, *M. J.*, Glasoe, *P. K.*, and Kleinberg, *J.*
- Audubert, *R.*, application of Debye-Hückel theory to titration of a mastic sol, I, 78. Emission of ultra-violet rays by chemical reactions, I, 119.
- and Racz, *C.*, emission of ultra-violet radiation and pyrolysis of thallium azide, I, 481.
- and Ralea, *R.*, photogenic effect and electronic activation of the N-N radical, I, 356.
- and Verdier, *E. T.*, emission of ultra-violet radiation by electrolysis of solutions of azoimide and sodium azide, I, 480.
- Auer, *H.*, kinetics of deposition processes on the basis of magnetic measurements, I, 517.
- Auer, *J.*, and Seager, *L. D.*, functional activity of pancreatic ampulla in rabbit, III, 387. Auto-injection of biliary passages from the gall bladder in rabbits, III, 987.
- Auer, *R.*, total intensity of ultra-radiation in the atmosphere, I, 174.
- Auerbach, *C.* See Crew, *F. A. E.*
- Auerbach, *R.*, colloidal physics of disperse gases, I, 75.
- Auerbach, *S. H.* See Goodpasture, *E. W.*
- Aufses, *A. H.*, extrapleural pneumonolysis in treatment of pulmonary tuberculosis, III, 824.
- Auger, *D.*, and Fessard, *A.*, cause of latent period in stimulation of electric organ, III, 28. Variations in impedance during discharge of electric organs, III, 968. Discharge of the electric organ of the *Raia undulata*, III, 1062.
- Auger, *P.*, study of large cosmic-ray showers at an altitude of 3500 m., I, 55.
- and Daudin, *J.*, penetrating component of large cosmic-ray showers, I, 593.
- Maze, *R.*, Ehrenfest, *P., jun.*, and Fréon, *A.*, large showers of cosmic rays, I, 175.
- Maze, *R.*, and Robley, extent and penetrating power of large cosmic-ray showers, I, 400.
- Robley, and Pluvinae, variations of large cosmic-ray showers as a function of barometric pressure, altitude, and time, I, 593.
- Auger, *V.*, two new molybdic acids, I, 155.
- and Ivanoff, (*Mlle.*) *N.*, sulpho-ceruleo-molybdic acid and its salts, I, 532.
- Augier. See Cossa.
- Augier, *J.* See Colin, *H.*
- Auler, *H.*, cell-free transplantation of cancer, III, 599.
- and Hohenadel, *B.*, transmission of the mice ascites carcinoma, III, 168.
- Koeniger, *W.*, Schlottmann, *H.*, Bylina, *S.*, and Schmidt, *H.*, resistance of malignant cells to cold, III, 279.
- Auluck, *F. C.*, entropy of Fermi-Dirac gas, I, 176.
- Auméras, *M.*, and Ricci, *A.*, determination of the constitution of non-isolable solid compounds; solid potassium polyiodides in aqueous-alcoholic solutions, I, 372.
- Aumonier, *F. J.*, distortion of paraffin sections, III, 546.
- Aumüller, *W.* See Ehrhart, *G.*
- Aurel, *G.*, form and development of the sweat glands of the sole of the human foot, III, 225.
- Aurivillius, *B.* See Sillén, *L. G.*
- Ansel, *W.* See Schroder, *Wilhelm.*
- Austen, *A. E. W.*, and Hackett, *W.*, electronic breakdown in solid dielectrics, I, 356.
- Austerweil, *G.*, ion exchange and its applications, I, 146.
- Austin, *F. L.* See Smith, *L. I.*, and Webb, *T. J.*
- Austin, *G.* See Roberts, *L. J.*
- Austin, *J. B.* See Armbruster, (*Miss*) *M. H.*
- Austin, *J. H.* See Gammon, *G. D.*
- Austin, *L. D. C.* See Wolf, *E. K.*
- Auvergnat, *R.*, Bugnard, *L.*, and Legris, *A.*, action of X-rays on the surface tension of plasma, III, 419.
- Avdalian, *D. C.*, diphenylmethane calorimeter, I, 339.
- Avens, *A. W.*, and Pearce, *G. W.*, silicotungstic acid determination of nicotine; errors involved and a new technique for steam-distillation of nicotine, II, 528.
- Averkova, *M. J.* See Novoselova, *A. V.*
- Avery, *B. F.*, and Mufarrij, *A. K.*, ultra-violet irradiation of the blood stream in septicæmia, III, 1006.
- Avery, *W. H.* See Crawford, *B. L., jun.*, and Linnett, *J. W.*
- Avierino, *C. D.*, electrocardiograms in acidosis, III, 558.
- Aviosor, *M. L.*, changes in the composition of cerebrospinal fluid in circulatory disturbances, III, 459. Urea content of cerebrospinal fluid (C.S.F.) in various degrees of circulatory insufficiency, III, 470.
- Avramenko, *V. I.*, and Neuman, *M. B.*, conditions of inflammation of gaseous mixtures. XIV. Effect of admixtures of acetone on cold and hot flame of butane, I, 526.
- Avramescu, *A.*, variation with temperature of the true specific heat of pure copper and aluminium up to their m.p., I, 556.
- Avrami, *M.*, direct determination of crystal structure from X-ray data, I, 433.
- Avrin, *I.* See Erickson, *B. N.*
- Awbery, *J. H.*, latent heat of fusion of aluminium, I, 14.
- Awe, *W.*, behaviour of alkaloids to filtered ultra-violet light at varying p_H ; determination of capillary configuration, I, 178. Constituents of the field poppy (*Papaver rhæas*), III, 538.
- Aze, *W. N.*, nitrogen compounds in petroleum distillates. XIV. Isolation of 2:4-dimethyl-8-ethylquinoline from the kerosene distillate of California petroleum, II, 342.

- Axe, W. N., and Bailey, J. R., nitrogen compounds from petroleum distillates. XIII. Isolation of four quinoline homologues and two aromatic bases of probable trinuclear cyclic structure, II, 341.
- Axelrod, A. E., and Elvehjem, C. A., effect of nicotinic acid deficiency on the cozymase content of tissues, III, 495.
- Axelrod, M. B. See Tschumanov, S. M.
- Axmaeher, F., and Funke, E., parenteral administration of glucose, III, 925.
- Ay, H. See Hennig, K.
- Ayers, A. D. See Jenny, H.
- Ayers, G. W., jun., pinacol-pinacolone rearrangement: preparation and rearrangement of tetramethylethylene bromohydrin, II, 45.
- and Agruss, M. S., organic sulphides: sp. gr. and refractive indices of aliphatic sulphides, I, 127.
- Aykroyd, O. E., and Zuckerman, S., factors in sexual-skin oedema, III, 60. Effect of sex hormones on the bulbo-urethral glands of rhesus monkeys, III, 267.
- Aykroyd, W. R., progress of work on nutrition in India, III, 282.
- and Krishnan, B. G., diet survey of families with leprosy, III, 917.
- Krishnan, B. G., and Passmore, R., stomatitis of dietary origin, III, 1071.
- Madhava, K. B., and Rajagopal, K., detection of malnutrition by measurements of arm, chest, and hip, III, 160.
- Ayling, E. E. See Hinkel, L. E.
- Ayman, D., and Goldshine, A. D., cold as a standard stimulus of blood pressure, III, 456. Breath-holding test on blood pressure, III, 746.
- Aynard, R. See Cabannes, J.
- Ayre, C. A. See Anderson, J. A.
- Ayres, G. H., and Smith, Francene, colorimetric determination of nickel as nickel-ammonia complex ion, I, 489.
- Azbelev, V. N., retention of life capacity of bacteria of the typhoid-paratyphoid group in concentrated solutions of common salt at various temperatures, III, 104.
- Azérad, E., Lewin, J., and Brochemin, R., effect of vitamin-C on the normal human blood-sugar, III, 604.
- Simonet, H., and Wolfshaut, C., effect of thyroxine and female sex hormones on adult male rat, III, 1049. Effect of large doses of female sex hormones on the thyroid of the adult male rat, III, 1049.
- Aziz, S. A. See Mukerji, S. K.
- Azuma, Y., glycolytic power of blood, III, 12.
- Azumi, T. See Asano, M.
- Azzam, R. C. See Schönberg, A.
- B.
- Baarle, F. van. See Bogaert, A. van.
- Baas-Becking, L. G. M., cause of the high acidity in natural waters, especially in brines, I, 225.
- See also Warren, Herbert.
- Baatz, H., cancer growth and pregnancy in mice, III, 698. Pregnancy and cancer growth, III, 990.
- Babaeva, A. V., absorption spectra of complex platinum compounds, I, 118.
- Babajan, A. T., formation of β -dimethyl- Δ^7 -hexine- β -diol, II, 46. Fission of acetylene γ -glycols by potassium carbonate, II, 355.
- Babajan, A. T., catalytic action of *p*-toluenesulphonic acid on acetylene γ -glycols. I. β -Dimethyl- Δ^7 -hexine- β -diol and γ -dimethyl- Δ^4 -octene- γ -diol, II, 531.
- Babak, S. F. See Trofimenko, A. P.
- Babalova, A. A. See Sabinina, L. E.
- Babasinian, V. S., action of bromine on nitrothiophen, II, 337.
- Babcock, C. G., mechanism of elimination of ovalbumin and its effects on elimination of iron by rabbit kidney, III, 596.
- Babcock, H. D., sunspot spectra, I, 229.
- Babcock, L. C. See Supplee, G. C.
- Babers, F. H., analysis of blood of the sixth-instar southern armyworm (*Prodenia eridania*), III, 451.
- Babey, A. M., painless acute infarction of the heart, III, 559.
- Babička, J. See Korinek, J.
- Babies, A., and Torok, A., liver function in cases of uræmia, III, 149.
- Babkin, B. P., experimental neuroses in animals and their treatment with bromides, III, 374.
- See also Alley, A.
- Babko, A. K., intra-complex coloured compounds. III. Constants of alizarin and alizarates; colorimetric determination of iron and aluminium, I, 25. Micro-analysis of silicates, I, 156.
- Babler, B. J. See Frediani, H. A.
- Babnik, H., technique of the thrombocyte count, III, 9.
- Baborovsky, J., hydration of ions calculated from the electrolytic transport of water, I, 79. Degree of hydration of the anion SO_4 derived from electrolytic water transport, I, 83.
- Babudieri, B., biological test for pregnancy, III, 59. Relationship between polychromatophils and granulo-filamentous substance in erythrocytes, III, 115. Pathogenic action of associations of acid-resistant bacteria with attenuated or non-virulent, tubercular strains, III, 334.
- Baca, D. E. See Wilhelmij, C. M.
- Bacaloglu, D., colour photography of sections, III, 546.
- Baccarani, M. See Piernucci, M.
- Baccari, V., effect of gastric administration of hydrochloric acid on blood-amino-nitrogen, III, 842.
- See also Cedrangolo, F.
- Baccialone, L. See Farinaud, E.
- Baccino, M., effect of coloured light on growth of young homeotherms, III, 971.
- Bach, A. N., theories of spontaneous oxidation, I, 148.
- Bach, D., mechanism of glycogenolysis in muscle, III, 771.
- Bach, F., action of silogran in pulmonary tuberculosis, III, 715.
- Bach, N., and Gilman, A., electrokinetic potential at gas-liquid interfaces. I. Cataphoretic velocity of gas bubbles in solutions of inorganic electrolytes. II. Cataphoresis of gas bubbles in solutions of capillary-active organic electrolytes, I, 198.
- See also Balaschova, N. A., and Zimin, A.
- Bach, S. J., metabolism of glycine, III, 296. Effect of phloridzin on carbohydrate metabolism *in vitro*, III, 708.
- Bach, T. F. See Scull, C. W.
- Bacharach, A. L., determination of vitamin-E. III. Relation between dosage and response to vitamin-E, III, 77. Physiological action of vitamin-E and consequences of -E deficiency; biological estimation, III, 1074.
- Bacher, A. See Janke, A.
- Bacher, R. F., scattering of neutrons by iron, I, 293. Interaction of configurations: *sd-pr*, I, 543.
- and Swanson, D. C., collimation of fast neutrons, I, 591.
- See also Crittenden, E. C., jun., Hoffman, J. G., and Tomboulion, D. H.
- Bacher, W., and Wagner, J., Raman effect. Cl. Iodine derivatives $\text{X}\cdot\text{CH}_3\text{I}$, I, 403.
- Bachman, C. See Gurin, S.
- Bachman, G. B., and Tanner, H. A., diethyl methylmalonate, II, 532.
- Bachmann, G., Haldi, J., Wynn, W., and Ensor, C., effect of high-glucose and high-fructose diets on body-weight, and on the fat, glycogen, and nitrogen contents of the liver and body of albino rats, III, 71. Effects of ingestion of glucose and fructose on rate of excretion of urine and various constituents, III, 276.
- See also Haldi, J.
- Bachmann, H., liberation of histamine by tissue damage, III, 932.
- Bachmann, J. H. See Glockler, G.
- Bachmann, L. See Hoff, F.
- Bachmann, R., zona germinativa of adrenal cortex, III, 754.
- Bachmann, W. E., synthesis of compounds related to 1:2-benzanthracene and cholanthrene, II, 105.
- and Barton, (Miss) M. X., relative proportions of stereoisomeric oximes formed by oximation of unsymmetrical ketones, II, 69.
- and Chernerda, J. M., synthesis of 9:10-dialkyl-1:2-benzanthracenes, II, 499.
- and Cole, W., coupling of derivatives of polycyclic hydrocarbons with glycine, II, 214.
- Cole, W., and Wilds, A. L., total synthesis of the sex hormone, equilenin, II, 261.
- Kennaway, E. L., and Kennaway, N. M., rapid production of tumours by two new hydrocarbons, III, 281.
- and Struve, W. S., synthesis of derivatives of chrysene, II, 539. Reactions of tetrahydrophenanthrene; synthesis of triphenylene and methyltriphenylene, II, 539.
- Bachrach, W. H., and Fogelson, S. J., role of the upper gastrointestinal tract in the aetiology of pernicious anaemia, III, 116.
- Schmidt, C. R., and Beazell, J. M., relation of bile and pancreatic juice to duodenal ulcer in dogs, III, 985.
- Backer, H. J., action of sodium with pinacol. I. Unsymmetrical *di*tert.-butylbutadiene. II. Pinacols from pinacol and β -*di*tert.-butylbutadiene, II, 238, 239. β -*Di*tert.-butylbutadiene, II, 354.
- and Kemper, H. G., derivatives of 4-spiroheptane [*cyclobutanecycloheptane*] identically substituted in the 2:6 [3:3']-positions, II, 17.
- and Lolkema, J., esters of methanetricarboxylic acid, II, 5. Esters of methanetetracarboxylic acid, II, 98.
- Strating, J., and Huisman, L. H. H., completely substituted anthraquinones and the corresponding anthracenes. I. Symmetrically substituted compounds, II, 482.
- Strating, J., and Kool, C. M. H., cyclic sulphones formed by the addition of sulphur dioxide to butadienes, II, 486.

- Backer, H. J., and Tamsma, A. F., 1:3-dithiols and derived cyclic thioacetals, II, 34.
See also Corput, J. G. van der, and Klasens, H. A.
- Backhouse, T., and Robertson, A., rottlerin. III., II, 485.
- Backhouse, T. C., haematuria from M. & B. 693, III, 1084.
- Bačkovský, J. M., imperfect crystals in X-ray spectroscopy, I, 159.
See also Dolejšek, V.
- Bacon, F. [with Gardner, J. H.], reactivity of *p*-fluorine in triarylmethyl chlorides, II, 61.
- Bacon, J. S. D., Bell, D. J., and Kosterlitz, H. W., acyl migration in a derivative of galactose, II, 469.
- Bacon, R. C. See McBain, J. W.
- Bacq, Z. M., action of synephrine and neo-synephrine on the membrane nictitans of the cat, III, 308. Sensitisation [of skeletal muscle] to potassium by veratrine, III, 826. Sensitisation of frog muscle by veratrine, III, 968. Acetylcholine and choline-esterase in invertebrates, III, 1020.
- Bremer, F., Brouha, L., and Heymans, C., vasomotor reflexes in sympathotomised cat, III, 966.
- Roskam, J., and Carbunescu, G., substance in blood of hypertensive patient augmenting effect of adrenaline, III, 967.
See also Coppée, G., Fredericq, H., Gofart, M., and Szent-Györgyi, A.
- Bacsich, P., and Folley, S. J., effect of oestradiol monobenzoate on gonads, endocrine glands, and mammae of lactating rats, III, 685.
- Badarau, G., passage of corpuscles through coulombian potential barriers, I, 56.
- Baddar, F. G., and Warren, Frank L., benzanthrone. II. Synthesis of 1-alkyl-benzanthrones-7; mechanism of Bally's reaction. III. Synthesis of 2-alkyl- and -aryl-benzanthrone-7; migration [of methyl] from the 1- to the 2-position, II, 377.
- Bade, H., skin reaction to X-irradiation in denervated regions, III, 784.
- Bader, R. E., substance similar to Dick toxin in filtrates of bacterial cultures, III, 1102.
See also Habs, H.
- Badger, G. M., and Cook, James W., synthesis of growth-inhibitory polycyclic compounds. I, II, 315.
- Badger, L. F., and Masunaga, E., relation of calcium deficiency to utilisation of vitamin-B₁₂, III, 1070.
- Badger, R. M., and Zumwalt, L. R., band envelopes of unsymmetrical rotator molecules. I. Calculation of the theoretical envelopes, I, 8.
See also Zumwalt, L. R.
- Badoche, M., heats of combustion of nitro-derivatives of the benzene series, I, 266.
- Backlund, B. See Ramberg, L.
- Baehr, E., atherosclerosis of the coronaries in relation to age, disease, and constitution, III, 20.
- Baer, E., and Fischer, H. O. L., isopropylidenglyceraldehyde. IV. Preparation of *d*(+)-isopropylidenglycerol. V. Synthesis of optically active glycerides from *d*(+)-isopropylidenglycerol. VI. Synthesis of the biological *l*(-)-α-glycerophosphoric acid. VII. Preparation of *l*-glyceraldehyde and *l*(-)-isopropylidenglycerol, II, 243, 296.
- Baer, H. L., absorption of ketohydroxycastrin through skin, III, 584.
- Baer, M., action of glucose in chronic hypertrophic rhinitis, III, 898.
- Bar, R., dispersion of ultrasonic waves in liquids, I, 14. Stroboscopic phenomena due to passage of light through two ultrasonic wave-trains, I, 514.
- Baer, R. L. See Sulzberger, M. B.
- Bär, W. See Günther-Schulze, A.
- Baertich, E. See Abderhalden, E.
- Baethke, E. See Sanderson, E. S.
- Bäz, G., loss determinations for dipole liquids and solid technical insulators for centimetre waves, I, 406.
- Bagalà, G., correlation between thyroid and parathyroid glands, III, 579.
- Bagchi, K. N., Ganguly, H. D., and Sirdar, J. N., lead in human tissues, III, 916.
- Bagdasarjan, C. S., optical sensitisation of silver halides. VI. Quantum yield in the photo-decomposition of sensitised silver bromide in connexion with the theory of sensitisation, I, 209.
- Bagg, H. J., and Hagopian, F., functional activity of the mammary gland of the rat in relation to mammary carcinoma, III, 698.
- Bagge, E., range of nuclear forces and the process of disintegration by ultra-radiation, I, 351.
- Baggenstoss, A. H., and Love, J. G., tumour of the pineal body, III, 583.
- Baginski, I., and Baginski, S., interstitial cells of ovary and the reticulo-endothelial system, III, 544.
- Bagiński, S., histological investigations on the blockade of the reticulo-endothelial system, III, 15.
and Borsuk, J., the thymus and the reticulo-endothelial system, III, 739.
- Czarnecki, E., and Hurynowicz, J., lesions of the nervous system in rabbits with anaphylaxis, III, 716.
See also Baginski, I.
- Bahl, R. K., and Singh, S., action of fuming nitric acid on iodine, I, 485. Copper periodates, I, 621. Action of hydrogen sulphide on paraperiodic acid, I, 623.
- Baidanov, A. D. See Petrov, A. D.
- Baidin, A., ovarian function after hysterectomy, III, 756.
- Baier, C. R., significance of trace elements and colloids in development of *Azotobacter* and its detection in water, III, 328.
- Bailar, J. C., jun., Stigman, C. A., Balthis, J. H., jun., and Huffman, E. F., stereochemistry of complex inorganic compounds. IV. Introduction of racemic organic molecules into optically active complex ions of cobalt and chromium, I, 576.
See also McReynolds, J. P.
- Bailey, B. E., nutritive value of flesh of red and white spring salmon, III, 1068. Value of bones of canned salmon in prevention and cure of rickets, III, 1073.
- Bailey, C. H. See Stamberg, O. E.
- Bailey, C. R., Hale, J. B., and Thompson, J. W., molecular structures of carbon and silicon tetrafluorides, I, 7.
- Bailey, H. H. See Bollman, V. L.
- Bailey, J. R. See Axe, W. N., and Roberts, S. M.
- Bailey, K., proteins of electrical tissue, III, 395.
- Bailey, K. C., retardation of chemical reactions. IX. Stabilisation of perchloroethylene [tetrachloroethylene] for medicinal purposes, II, 296.
- Bailey, K. C. See also Blair, D.
- Bailey, R. See Smith, E. Lester.
- Bailey, W. K., vegetative reproduction of squash types, III, 533.
- Baillie, J. C. See Gilman, H.
- Baillart, P., capillary function, as seen by the ophthalmologist, III, 746.
- Baillart, P., functional disorders of the retina, III, 837.
- Baillif, R. N., microscopic changes in the hypophysis of the albino rat following exposure to cold, and their relationship to the physiology of secretion, III, 45.
See also Baker, D. D.
- Bailey, J. See Remlinger, P.
- Bailey, (Mlle.) M. C., reversibility of the glycerophosphoric change, I, 205. Hydrolysis of α- and β-glycerophosphates, II, 403.
- Bailey, R., use of the infra-red in the study of minerals, I, 221.
- Bain, C. W. C., interference dissociation, III, 235.
- Bain, J. P., and Pollard, C. B., piperazine derivatives from amino-alcohols, II, 182.
- Baine, O., preparation of sulphanilamide, II, 542.
- Baines, E. J., and Wien, R., absorption and excretion of 2-sulphanilylamino-pyridine, III, 711.
- Bair, H. L. See Sanford, H. S.
- Bairati, A., morphological and physical characteristics of tendon-fibrils and their changes during growth, III, 155. Changes in the fibres of tendons during development and growth, III, 543.
- Baird, D., Michie, A. M., and Macdonald, R. F., sulphonamide therapy in puerperal sepsis, III, 1081.
- Baisset, A., Bugnard, L., Soula, C., Valats, A., and Rouzaud, J., storage of glucose in tissues. I. and II., III, 772.
- Bajić, V. See Flumiani, G.
- Bajuschkina, K. S. See Kapustinski, A. F.
- Bak, A. See Blom, J.
- Bak, B., tartronic acid, II, 201.
- Bak, B. V., existence of hydrates of definite chemical composition in liquid phases. I., I, 558.
- Bak, M. A., and Nikolaevskaja, N. N., γ-rays from radioactive iodine (¹²⁸I), I, 397.
- Bakalos, D. See Thaddeus, S.
- Bakels, H. A. See Blanksma, J. J.
- Baker, A. B., cerebral lesions in hypoglycaemia. III. Experimental investigations, III, 970.
- Baker, A. L., jun. See Caley, E. R.
- Baker, A. Z., and Wright, M. D., vitamin-B₁₂ content of foods. II. Additional values, III, 164. Rat bradycardia method of determining vitamin-B₁₂, III, 920.
- Baker, B. R. See Adams, R.
- Baker, C. P. See Livingston, M. S.
- Baker, D. D., and Baillif, R. N., role of capsule in suprarenal regeneration studied with aid of colchicine, III, 912.
- Baker, E. E., and McLung, L. S., determination of heat-resistance of non-spore-forming bacteria, III, 530.
- Baker, E. M., Chaddock, R. E., Lindsay, R. A., and Werner, R. C., equilibria between liquid and vapour in the system ethyl alcohol-cellosolve-water, I, 611.
- Hubbard, R. O. H., Huguet, J. H., and Michalowski, S. S., equilibria in the systems ethyl alcohol-water, ethyl alcohol-cellosolve, and cellosolve-water, I, 611.

- Baker, F., rôle of fungi and actinomycetes in the decomposition of cellulose, III, 725.
- Baker, F. C. See Bennett, B. L.
- Baker, H., decreased sugar tolerance due to infection; case of acute appendicitis complicated by unexpected discovery of diabetic state, III, 997.
- Baker, H. H., jun., and Müller, R. H., pulse amplifier for differential electro-metric titrations, I, 580.
- Baker, James G., and Menzel, D. H., physical processes in gaseous nebulae. III. The Balmer decrement, I, 6.
- Menzel, D. H., and Aller, L. H., physical processes in gaseous nebulae. V. Electron temperatures, I, 167.
- See also Aller, L. H., and Menzel, D. H.
- Baker, J. K., M. & B. 693 in *Clostridium welchii* infection, III, 1082.
- See also Gayus, I. K.
- Baker, J. W., polar effects of alkyl groups, I, 453.
- and Groves, L. G., determination of dipole moments in the vapour phase. II. Moments of alkylbenzenes and alkylcyclohexanes, I, 453.
- Baker, L. See Calder, R. M.
- Baker, L. E., pupillary response conditioned to subliminal auditory stimuli, III, 135. Causes of the discontinuity of growth of fibroblasts cultivated in embryo-juice, III, 225. Secretion of iodine by thyroid glands cultivated in the Lindbergh pump, III, 256.
- and Ebeling, A. H., maintenance of fibroblasts in artificial and serumless media, III, 225. Artificial maintenance media for cell and organ cultivation, III, 644.
- Baker, R. H., reaction of esters with aluminium isopropoxide, II, 2.
- Baker, R. L. See Osgood, E. E.
- Baker, W., synthesis of 5:6-dihydroxyflavone and the structure of primetin, II, 385.
- and Banks, R., condensation product of 5-methylcoumaranone, II, 176.
- and Besly, D. M., condensation products of phenols and ketones. III. Hydroxyquinol, pyrogallol, and *m*- and *p*-cresols with acetone. IV. *o*-Cresol and acetone, II, 109, 502.
- Penfold, A. R., and Simonsen, J. L., structure and synthesis of croweacin, II, 210.
- Baker, W. O., and Smyth, C. P., molecular freedom and melting in alkyl halides, I, 453. Vitrification and crystallisation of organic molecules and the dielectric behaviour of isobutyl and isoamyl bromides, I, 550. Mechanism of orientation in isobutyl and isoamyl bromide glasses, I, 551. Molecular rotation and polymorphism in the *tert*-butyl halides, I, 598.
- Baker, Z., and Miller, B. F., metabolism of creatine and creatinine. II. Distribution of creatine and creatinine in tissues of the rat, dog, and monkey, III, 988.
- See also Himwich, H. E., and Miller, B. F.
- Bakker, A., behaviour of a rabbit's lens and iris in a perfused culture, III, 37. Infra-red cataract, III, 752.
- Bakker, C. J. See Aten, A. H. W., jun., and Heyn, F. A.
- Bakos, T. See Goll, G.
- Bakshi, H. S., Jalota, R. S., Narang, K. S., and Ray, J. N., rottlerin. V., II, 275.
- Bakuschinskaja, O. A. See Plewako, E. A.
- Bakwin, H., tetany in new-born infants (relation to physiological hypoparathyroidism), III, 476.
- Balado, M., diabetes insipidus, III, 49. Anatomical functions of external geniculate body in man, III, 668.
- Romero, L. F., and Noiseux, P. J., human electroencephalogram, III, 970.
- Bălănescu, G., and Ionescu, V. T., adsorption of ions on polar adsorbents in relation to the reaction $[p\pi]$ of the medium. II. Adsorption from mixtures of multivalent anions on ferric hydroxide in relation to alkali concentration. III. Discussion and interpretation of results, I, 561.
- Bălănsard, J., and Delphaut, J., diuretic action of butcher's-broom (*Ruscus aculeatus*), III, 312.
- and Martini, M., bark of *Ostryderis chevalieri*, Dunn., III, 1113.
- and Raybaut, M., [pharmacology of] Provençal sarsaparilla (*Smilax aspera*), III, 312.
- Balarev, D., inner adsorption in salt crystal systems. VI., I, 72. Disperse structure and contamination of solid systems, I, 369.
- [with Kolarov, N.], crystal growth, I, 195. Disperse structure of solid systems and its thermodynamic basis, I, 521.
- Balashova, N. A., and Bach, N., electrochemistry of platinum sols. III. Positive sols, I, 78.
- and Frumkin, A., electrokinetic behaviour of platinum at different potentials, I, 193.
- Balassa, G., and Emodi, G., swelling of skin, III, 515.
- and Szántó, G., antagonism between vitamin-A and -C and thyroid action, III, 493.
- Balasse, G., continuous spectrum of atomic hydrogen, I, 49.
- Balavoine, P., variation of the composition of the water of Lake Geneva, I, 495. [Absorption of ammonia by] snow, I, 496.
- Balce, S., relation between compressibility and solubility of metals in acids, I, 253.
- Baldacci, E., and Verona, O., activity of actinomycetes on cellulose, III, 725. Isolation of schizomycetes (*Cytophaga*) from the intestine of termites, III, 726.
- Baldassi, G., micro-determination of copper in the liver, III, 65.
- Baldes, E. J. See Essex, H. E., Herrick, J. F., Roepke, R. R., and Smith, H. L.
- Baldeschwieler, E. L., and Wilcox, L. Z., thermostatic bath for low-temperature viscosity determinations, I, 339.
- Baldi, F., changes in chronaxie of the sciatic nerve of rabbit due to short-wave irradiation, III, 193. Distant action of short waves on the intact animal or after section of the sciatic nerve or spinal cord. I. and II., III, 319.
- Baldinger, E., and Huber, P., disintegration of nitrogen by fast neutrons, I, 443. Nuclear transformations of nitrogen with fast neutrons, I, 592.
- Baldinger, L. H. See O'Connor, S. F.
- Baldini, V. See Gallo, U.
- Baldwin, F. M., and Robinson, H. D., effect of oxygen pre-breathing on anoxæmia in albino rats, III, 899.
- Baldwin, R. See Riebsomer, J. L.
- Baldwin, R. B., spectrum of γ Cassiopeia in the photographic region. I. and II., I, 50, 347.
- Baldwin, W. C. G., rotatory dispersion in the amine series. IV. Optical activity of diamines, I, 10.
- Bale, W. F. See Hahn, P. F., Haven, F. L., and Manly, M. L.
- Balgairies, E., and Christiaens, L., distribution of iso-agglutinogens A and B in northern France, III, 229. Distribution of blood-agglutinogens M and N in northern France, III, 229. Detection of hæmo-agglutinin-M and -N in minimal quantities of dried blood, III, 551.
- Balinski, B. I., determination of endo-dermal organs in amphibia, III, 112.
- Balitzkaja, N. A. See Lebedinski, I. V.
- Baljekar, P. N. See Prasad, M.
- Balks, R., and Wehrmann, O., determination of protein-sulphur in plants, III, 342. Use of perchloric acid mixtures in the decomposition of animal tissues, III, 540.
- Ball, C. R., scorpion stings, III, 415.
- Ball, E. See Bodansky, M.
- Ball, E. G., xanthine oxidase; purification and properties, III, 624. Chemical reactions of nicotinamide *in vivo*, III, 1071.
- Ball, J., and Hartman, C. G., delayed ovulation after oestrin administration in the intact monkey, III, 1053.
- Ball, L. See Hunt, F. B.
- Ballaban, H. E., 1:2-diaminoanthraquinone-3-sulphonic acid as a reagent for copper in drop analysis, I, 386.
- Ballard, S. S., spectrographic analysis of three [species of] arthropods, III, 845.
- Ballard, W. W., mutual size regulation between eyeball and lens in *Amblystoma*, studied by heteroplastic transplantation, III, 835.
- Ballaus, O., Raman effect. XCIV. Tetrolic acid and its esters, I, 121.
- Ballezo, H., arrangement for solution of small amounts of substance in the hot at constant volume, I, 282. Device for washing precipitates with the filtrate, I, 282. Stirring arrangement for micro-analytical purposes, I, 283.
- See also Dworzak, R.
- Ballentine, R., quantitative transfer of aqueous solutions, I, 368.
- Balli, A., relationship between body- and liver-weight in *Talpa europæa*, L., III, 1059.
- Ballif, L., and Ghercovic, I., tissue-chloride in experimental hyperthyroidism in guinea-pigs, III, 138.
- Lvov, A., Querido, A., and Ornstein, L., nicotinamide content of the blood in pellagra, III, 994.
- Nitzulescu, J., Ornstein, I., and Ballif, L. E., ascorbic acid content of cerebrospinal fluid in pellagra, III, 852.
- Ballif, L. E. See Ballif, L.
- Ballou, G. See Young, W. G.
- Balls, A. K., enzyme catalysis, III, 97.
- and Lineweaver, H., crystalline papain, III, 1097. Nature of a group in papain essential to its activity, III, 1097.
- See also Martin, L. F.
- Ballweg, H. A. See Buchanan, J. A.
- Baló, J. von, influence of ammonia-poisoning on the blood and blood formation, III, 113.

- Balozet, *L.*, resistance of infectious anæmia virus to light from a mercury-vapour lamp, III, 1015.
- Baltaceanu, *G.*, Stănescu, *M.*, and Ioanid, *N.*, thallium poisoning, III, 509.
- Balteanu, *I.* See Slatineanu, *A.*
- Balthus, *J. H., jun.* See Bailar, *J. C.*
- Baltzer, *O. J.*, and Jauncey, *G. E. M.*, X-ray fluorescing coefficient and the orientation of a zinc crystal, I, 512.
- Baly, *E. C. C.*, photosynthesis of carbohydrates from hydrated carbon dioxide, I, 574.
- Pepper, *W. A.*, and Vernon, *C. E.*, adsorption of hydrous metallic oxides by kieselguhr, I, 519.
- Bamann, *E.*, "phosphatatic" action of hydrogels, I, 270.
- and Meisenheimer, *M.*, phosphatatic actions of hydrogels. II. Behaviour of metallic hydroxides towards phosphoric esters. IV. Catalytic fission of pyro- and poly-phosphates, I, 34.
- Bambach, *K.*, determination of lead by dithizone; modifications and improvements of the Hubbard-Clifford-Wichmann method as applied to biological material, I, 488.
- Bamberger, *P.*, and Never, *H. E.*, metabolism in experimental diphtheria of dogs, III, 294.
- Bame, *E.* See Wikoff, *H. L.*
- Bamford, *C. H.*, reaction between nitric oxide and nitrogenous free radicals, I, 326. [Decomposition of] hydrazine, I, 622. Photolysis of organic nitrogen compounds. I. Dimethyl- and diethylnitrosoamines. II. Aliphatic amines, II, 100.
- Bamforth, *J.*, and Kendall, *D.*, case of megakaryocytic myelosis with paraplegia, III, 812.
- Banchetti, *A.*, viscosity of dilute solutions of *o*-nitrobenzoic acid, I, 318. Naphthylacrylic acids and their derivatives. I. β -2-Naphthylcrotonic acids, II, 423.
- Bancroft, *D.* See Birch, *F.*
- Bancroft, *F. W.*, and Stanley-Brown, *M.*, treatment of actinomycosis with thymol, III, 307.
- Bancroft, *W. D.*, and Rutzler, *J. E., jun.*, colloid chemistry of leaf and flower pigments. I. Precursors of anthocyanins. II. Qualitative analysis of leaf pigments, III, 110, 220.
- Band, *W.*, statistical mechanics of mobile monolayers, I, 22. Dissociation treatment of condensing systems, I, 358.
- Bandier, *E.*, determination of nicotinic acid in biological material, III, 953. Treatment of exogenous pellagra with stomach preparations; possible identity of vitamin- B_2 complex with "cyanide-insensitive enzyme complex," III, 1071.
- and Hald, *J.*, colorimetric reaction for determination of nicotinic acid, II, 196.
- See also Petri, *S.*
- Bandow, *F.*, absorption spectra of organic substances in concentrated sulphuric acid. IV. Heterocyclic compounds. V. Compounds containing condensed carbon rings, I, 57, 354. Effect of moistening on intensity of fluorescence of adsorbed dyes, I, 180. Adsorption values of porphyrins, I, 195.
- Bandy, *M. C.*, mineralogy of three sulphate deposits [Chuquicamata, Quetena, and Alcaparrasa] of northern Chile, I, 163.
- Banerjee, *A. K.* See Mitra, *S. K.*
- Banerjee, *B. N.*, and Datta, *N. C.*, carotenoid feeding and goats' milk, III, 163.
- Banerjee, *D. N.*, anaerobic culture of *Vibrio cholerae*; variations in p_H and the toxic power, III, 529.
- Banerjee, *H. N.*, constitution of clerodin, the active bitter principle of *Clerodendron infortunatum*. II., II, 439.
- See also Kar, *B. K.*, and Nag, *N. C.*
- Banerjee, *K.*, and Bhattacharya, *J.*, diamagnetic susceptibilities of some non-aromatic organic crystals, I, 409.
- Banerjee, *P. C.*, vanadous sulphate as a reducing agent. III. Determination of cerium, I, 99.
- Banerjee, *S.*, magnetic anisotropies of organic crystals in relation to their structures, I, 409.
- See also Krishnan, *K. S.*
- Banerjee, *T.* See Ghosh, *J. C.*
- Banerji, *G. G.*, and Harris, *L. J.*, assessing level of nutrition; carbohydrate tolerance test for vitamin- B_1 . I. Experiments with rats, III, 919.
- Banfield, *W. M.*, effect of nitrogen on inception and development of Dutch elm disease on American (Moline) elm, III, 435. Relation of sap flow, vessel length, and spore distribution to development of Dutch elm disease in American elm, III, 438.
- Bang, *O.*, Boje, *O.*, and Nielsen, *M.*, physiology of severe muscular work, III, 367.
- and Ørskov, *S. L.*, magnesium content of erythrocytes in pernicious and other anæmias, III, 959.
- Banga, *I.*, Ochoa, *S.*, and Peters, *R. A.*, active form of vitamin- B_1 in tissues, III, 765. Pyruvate oxidation in brain. VI. Active form of vitamin- B_1 and role of C_4 dicarboxylic acids, III, 855.
- and Philippot, *E.*, oxidase of dihydroxymaleic acid, III, 623.
- Philippot, *E.*, and Szent-Gyorgyi, *A.*, dihydroxymaleic acid oxidase, III, 321.
- Bank, *G. von.* See Pfeiffer, *P.*
- Bank, *J.*, and Renshaw, *J. F.*, chronic superficial gastritis, III, 591.
- Bank, *O.*, vital staining of the cell nucleus with basic stains, III, 445. Separation of stained vacuole colloids by dyes, III, 741.
- and Kleinzeller, *A.*, vital staining of fibroblast nuclei with crystal-violet, III, 1.
- See also De Jong, *H. G. B.*
- Banks, *C. K.*, and Hamilton, *C. S.*, arsenic derivatives of phenylmethylcarbinol, II, 190. Organo-selenium compounds. I. Selenium diphenyl dihydroxides and diphenylselenides, II, 525.
- Banks, *R.* See Baker, *W.*
- Banks, *T. E.* See Nahmias, *M. E.*
- Banks, *W. H.*, vapour pressure-temperature equation and Burnop's b.p. function, I, 190.
- Bannerman, *H. M.*, and Stoiber, *R. E.*, fluorite deposits in Westmoreland, New Hampshire, I, 344.
- Bannick, *E. G.*, Brown, *Alex E.*, and Foster, *F. P.*, therapeutic effectiveness and toxicity of sulphanilamide, III, 176.
- See also Kaump, *D. H.*, and Randall, *L. M.*
- Bannister, *F. A.*, Pabst, *A.*, and Vaux, *G.*, crystallography of sartorite, I, 285.
- See also Vaux, *G.*
- Baños, *A., jun.*, asymptotic orbits of primary cosmic rays, I, 296.
- Bansal, *R. K.* See Sampath, *S.*
- Bansi, *H. W.*, thyrotoxic crisis and coma, III, 476. Mineral metabolism, III, 772.
- Kalinke, *M.*, and Schilling, *J.*, action of analeptic drugs on the circulation, III, 187.
- Banting, *F. G.*, resistance to experimental cancer, III, 699.
- Franks, *W. R.*, and Gairns, *S.*, experimental insulin and metrazol shock. VII. Anti-insulin activity of insulin-treated patient, III, 249.
- Hall, *G. E.*, Janes, *J. M.*, Leibel, *B.*, and Loughheed, *D. W.*, physiological studies in experimental drowning, III, 125.
- Bantle, *W.*, specific heat anomaly of potassium dihydrogen phosphate at the upper Curie point, I, 603.
- and Scherrer, *P.*, anomaly of the specific heat of potassium dihydrogen phosphate at the upper Curie point, I, 461.
- Banus, *M. G.*, and Zetlin, *A. M.*, relation of isometric tension to length in skeletal muscle, III, 242.
- Banyai, *A. L.*, intraperitoneal pressure in artificial pneumoperitoneum, III, 593.
- Baonville, *H.*, Ley, *J.*, and Titeca, *J.*, traumatic bilateral destruction of the prefrontal lobes, III, 468.
- Bapat, *V. V.* See Kolhatkar, *G. B.*
- Bapayya, *K.*, effect of temperature on characters of the wings accompanying the Rayleigh lines in liquids, I, 403.
- Baptist, *M.* See Hamblen, *E. C.*
- Barac, *G.*, colorimetric determination of phosphorus in urine, III, 154. Determination of phosphorus by the method of Bell, Doisy, and Briggs, III, 540.
- and Brull, *L.*, determination of different forms of faecal phosphorus, III, 484.
- See also Dubois, *L.*
- Barach, *A. L.*, Martin, *John*, and Eckman, *M.*, positive pressure respiration in acute pulmonary oedema, III, 240.
- and Swenson, *P.*, positive pressure breathing and bronchi, III, 747.
- Baraige. See Lian, *C.*
- Barakat, *M. Z.* See Schonberg, *A.*
- Baranaev, *M. K.* See Skljarenko, *S. I.*
- Baranovskaja, *N. B.* See Turova-Pollak, *M. B.*
- Baranowski, *T.*, crystallisable proteins from rabbit's muscle extract, III, 826. Crystalline proteins from rabbit muscle, III, 826.
- Bárány, *A.*, treatment of otogenic vertigo with monotrean, III, 575.
- Bárány, *E.*, and Sperber, *E.*, absorption of glucose against a concentration gradient by the small intestine of the rabbit, III, 593.
- Baranyai, *P.* See Jeney, *A. von.*
- Barath, *E.*, action of pituitary grafts in diabetes insipidus, III, 379. Classification and frequency of arterial hypertension, III, 457.
- Barbanti-Silva, *L.* See Pierucci, *M.*
- Barbaron, *M.*, variation of Young's modulus for iron at low temperatures, I, 408.
- Barbas, *M. I.*, and Schulutko, *I. B.*, clinical significance of the insulin test of E. S. London. I. Reaction in patients after insulin administration. II. Reaction in diabetics after peroral administration of sugar. III. Reaction in diabetics after intravenous sugar administration, III, 262.

- Barber, A., and Champion, F. C., scattering of fast β -particles by mercury nuclei, I, 52.
See also Champion, F. C.
- Barber, H. H. See Maynard, J. L.
- Barber, M., comparative study of *Listerella* and *Erysipelothrix*, III, 429.
- Barbier, D., and Chalonge, D., atmospheric ozone, I, 238, 495.
- Chalonge, D., Schahmanèche, F., and Morguleff, (Mlle.) N., Balmer discontinuity in the spectrum of supergiant stars of types B, A, and F, I, 50.
- Barbiere, J., and Matti, J., aminopentane-polyols, II, 52.
- Barbot, A., degradations and thermal condensations of β -hydroxyethylenic compounds with particular reference of ricinoleic acid, II, 356.
- Barbour, G. M. See Carpenter, C. M.
- Barbour, H. G., and Dickerson, V. C., pharmacological action of D_2O . VII. Its effect on hydrolysis of acetylcholine, III, 505.
- Porter, J. A., and Seelye, J. M., morphine as a metabolic stimulant, III, 508.
See also Hemingway, A.
- Barbour, O. E., therapeutic effects of whole adrenal gland by mouth, III, 139.
- Bărbulescu, F. See Rădulescu, D.
- Bărbulescu, N., liquids, I, 15. Additivity of the van der Waals constant a and molecular association, I, 190. Demonstration of Pflüger's law, III, 244.
- Barchasch, A. P., anaerobic breakdown of phosphogluconic acid in the presence of acetaldehyde, III, 1009.
- Barchewitz, P., absorption spectra in the red and near infra-red (6000—10,000 Å.), I, 240. (OHv) bands of acids in the vapour state; a new harmonic, I, 240. Absorption of naphthalene derivatives in the very near infra-red, I, 450.
- and Costeanu, G., absorption spectra in the very near infra-red (6000—10,000 Å.) of ammonium salts, I, 7.
- and Garach, J., absorption spectrum of thiophen and its homologues, I, 448.
- and Parodi, M., absorption spectra of monosubstitution products of benzene in the far infra-red from 180 to 600 μ .¹ (17—55 μ), I, 60. Absorption spectra in the far infra-red (20—60 μ) of halogen derivatives of methane and some monosubstituted derivatives of benzene, I, 240. Transmission of several nitriles in the far infra-red, I, 449.
See also Chiurdoglu, G.
- Barclay, A. E., and Franklin, K. J., time of functional closure of foramen ovale in lamb, III, 122.
- Barcroft, J., and Barron, D. H., development of [reflex] behaviour in foetal sheep, III, 828.
- Barron, D. H., Cowie, A. T., Forsham, P. H., and MacDonald, A., effect of asphyxia on inhibition of respiratory movement in sheep's foetus, III, 746.
- and Kennedy, J. A., distribution of blood between foetus and placenta in sheep, III, 352.
- Kennedy, J. A., and Mason, M. F., blood volume and kindred properties in pregnant sheep, III, 352. Determination of oxygen consumption of foetal sheep, III, 563.
- Kramer, K., and Millikan, G. A., oxygen in carotid blood at birth, III, 241.
- Bardeen, J., and Feenberg, E., symmetry effects in the spacing of nuclear energy levels, I, 56.
and Van Vleck, J. H., expressions for the current in the Bloch approximation of "tight binding" for metallic electrons, I, 237.
- Bardeens, G. W., treatment of infectious keratitis with mercurochrome, III, 188.
- Bardin, P. See Villaret, M.
- Bareillier, G. See Bénard, H.
- Barelare, B., jun. See Richter, C. P.
- Barendregt, F. See Dols, M. J. L.
- Barengi, G., mechanism of anti-insulin activity of aqueous-glycerol extracts of anterior pituitary gland, III, 474.
- Barer, A. P. See Fowler, W. M.
- Bargen, J. A. See Brown, Alex E., and Falconer, M. A.
- Barger, G., Dyer, E., and Sargent, L. alkaloids of *Mitragyna rotundifolia*. I, II, 564.
and Easson, A. P. T., synthesis of β -2-thienylalanine and of β -2-thienylethylamino, II, 84.
Madinavetia, J., and Streuly, P., calycanthine, II, 291.
and Sargent, L. J., alkaloids of *Artabotrys suaveolens*, II, 396.
and Weitnauer, G., constitution and synthesis of the alkaloid anonaine, II, 564.
- Bargeton, M., muscular syncytium in *Lumbrius*, III, 27.
- Barham, H. N., copper precipitation method for kojic acid determination, II, 134.
- Barieau, R. E. See Giauque, W. F., and Stout, J. W.
- Bariéty, M., and Kohler, D., effect of various drugs on renal volume change following ureter stimulus, III, 307. Effect of sympatholytic drugs on spleen, III, 861. Effect of sympatholytic drugs on blood count, III, 958. Effect of small doses of nicotine on arterial pressure and kidney volume, III, 1001.
See also Troisier, J.
- Barillet, F., and Choissard, A., Curie's law; law of growth of crystals in presence of tenso-active substances, I, 358.
- Barinova, S. A., citric acid accumulation in cultures of *Aspergillus niger* in relation to sugar concentrations of nutrient media and of plain sugar solutions, III, 326.
- Barkan, G., haemoglobin determination, haemometer calibration, and optical constants, III, 650.
and Schales, O., haemoglobin from bile pigment, III, 66.
- Barkas, W., safety device for differential oil manometer, I, 390.
- Barkas, W. H., analysis of nuclear binding energies, I, 297. New reactions in light nuclei with high-energy protons, I, 505.
and White, M. G., disintegration of deuterium by protons and p - n reactions in light gaseous elements, I, 505.
See also Weil, G. L.
- Barkenbus, C., Hopkins, R. L., and Allen, J. F., use of n -butyl chlorosulphonate and chlorosulphite in the Friedel-Crafts reaction, II, 497.
- Barker, E. F., perpendicular vibrations of the ammonia molecule, I, 299. Vibrational assignments in ethane, I, 300.
See also Gage, D. M.
- Barker, M. H., blood chemistry in protein-deficient and toxic pregnancies, III, 11.
and Robinson, R. W., sodium chloride tolerance in chronic nephritis, III, 275.
See also Lindberg, H. A., and Wald, M. H.
- Barker, N. W. See Keith, N. M.
- Barker, P. S., Shrader, E. L., and Ronzoni, E., effects of alkalosis and acidosis on electrocardiogram, III, 559.
- Barker, R. H., placental transfer of sulph-anilamide, III, 502.
- Barker, R. L. See Haworth, R. D.
- Barker, S. B., Shorr, E., and Malam, M., Pasteur reaction; effect of iodoacetic acid on carbohydrate metabolism of isolated mammalian tissues, III, 855.
and Smyth, E., mechanical pump for the drawing of gas samples, I, 45.
See also Phillips, R. A.
- Barker, W. H., and Hummel, L. E., macrocytic anaemia in association with intestinal strictures and anastomoses, III, 742.
- Barkla, H. M. See Shire, E. S.
- Barks, O. L., and Overholser, M. D., hyperplasia and hypertrophy of the uterine musculature in ovariectomised rats following oestron injections, III, 56.
- Barlag, T. See Steinkopf, W.
- Barlow, O. W. See Zorn, C. M.
- Barmaschenko, I. See Plotnikov, V. A.
- Barnard, G. P., spectral sensitivity of selenium rectifier photo-electric cells, I, 340.
- Barnard, J. H. See Twiss, J. R.
- Barnard, L. See Taylor, F. B.
- Barnard, R. D., fulminate-ferriicyanide reagent; colour reaction for fulminates, II, 250.
and Neitzel, W., reaction of fulminate with methaemoglobin, III, 9. Reactions of hydrogen selenide with haemoglobin derivatives, III, 366.
See also Steigmann, F.
- Barnell, H. R., distribution of carbohydrates between component parts of the wheat plant at various times during the season, III, 882.
- Barnes, A. R. See Noth, P. H.
- Barnes, B. O. See Kanter, A. E.
- Barnes, C. A., Thompson, T. G., and Zeussler, F. A., oceanographic investigations of Bering Sea and Bering Strait, I, 225.
- Barnes, E., action of strong solutions of alkalis on potassium ferriicyanide, I, 623.
- Barnes, J., mercury poisoning treated with sodium formaldehydesulphoxylate, III, 414.
- Barnes, R. H., MacKay, E. M., Moe, G. K., and Visscher, M. B., utilisation of β -hydroxybutyric acid by the isolated mammalian heart and lungs, III, 16.
- Wick, A. N., Miller, E. S., and MacKay, E. M., effect of adrenalectomy on rate of fat absorption, III, 1050.
See also MacKay, E. M.
- Barnes, S. W., recording ionisation chamber; direct-current amplifier system for artificial radioactive decay studies, I, 160. Proton activation of indium and cadmium, I, 592.
and Aradine, P. W., radioactivity induced by nuclear excitation. II. Excitation by protons, I, 173.
- Du Bridge, L. A., Wiig, E. O., Buck, J. H., and Strain, C. V., proton-induced radioactivity of elements of atomic number greater than 11, I, 54.
See also Du Bridge, L. A.

- Barnes, *T. C.*, influence of heavy water and temperature on the electric potential of frog skin, III, 394. Experiments on *Ligia* in Bermuda. V. Effects of salts and heavy sea-water, III, 762. Electrical potential of frog skin stained with fluorescent dyes, III, 1095.
- Barnett, *A.*, skin impedance findings in mental disease, III, 1037.
- Barnett, *C. W.* See Beckh, *W.*
- Barnett, *E. de B.*, condensation of benzylidone chloride with *o*-xylene, II, 148.
- Barnett, *H. L.*, Hartmann, *A. F.*, Perley, *A. M.*, and Ruhoff, *M. B.*, treatment of pneumococcal infections in infants and children with sulphapyridine, III, 611.
See also Hartmann, *A. F.*
- Barnett, *J.*, and Reichstein, *T.*, cholanolic acid derivatives with substituents in the 11- and 12-position. II, II, 166.
- Barnewitz, *H. J.*, early treatment of male gonorrhoea with uleron, III, 1083.
- Barney, *J. D.*, and Suby, *H. I.*, unilateral renal disease with arterial hypertension, III, 896.
- Barnick, *M.*, and Hanemann, *H.*, system aluminium-iron-magnesium, I, 19.
- Barnóthy, *J.*, and Forró, *M.*, variation of [cosmic-ray] shower intensity and mesotron disintegration over a period, I, 296. Diurnal and sidereal effects and the meteorologic influences on shower and vertical intensity of cosmic rays, I, 351. Cosmic-ray particles at great depth, I, 351. Directional distribution of the hard and soft components of cosmic radiation, I, 547.
- Barnstein, *N. G.*, and Mossman, *H. W.*, origin of the penile urethra and bulbourethral glands with particular reference to the red squirrel (*Tamiasciurus hudsonicus*), III, 443.
- Barnum, *C. G.*, and Woodward, *J. C.*, severe hyperchromic macrocytic anaemia of pregnancy, III, 228.
- Baron, *E.*, aspiration of biopsy material from the liver, III, 485.
- Barone, *R.*, effect of adonidine in contact with frog's striated muscle, III, 126. Paralysis of motor nerves by digitalis substances. I. *Adonis* extracts and adonidine in poikilotherms. II. Effect of adonidine on striated muscle. III. Effect of adonidine on striated muscle, III, 182, 309.
- Baroni, *A.*, lithium alloys; thermal and X-ray analysis of the systems lithium-zinc and lithium-magnesium, I, 193. Mercury halogenosulphides and halogenoselenides, I, 381. Telluromercaptans, II, 146. Water of constitution and of hydration of animal and vegetable textile fibres, III, 1007.
- Baronofsky, *I. D.*, and Schechtman, *A. M.*, analysis of experimental production of bifid tails by ultra-violet irradiation, III, 194.
- Barpujari, *G. N.* See Chatterjee, *Nripendranath*.
- Barr, *E. S.*, and Craven, *C. J.*, absorption [spectra] of aqueous solutions at 4.72μ , I, 136.
- Barrabé, *L.* See Bertrand, *L.*
- Barracough, *E.*, Batty, *J. W.*, Heilbron, *I. M.*, and Jones, *W. Elwyn*, polyene series. I, II, 548.
- Barrell, *H.*, and Sears, *J. E.*, refraction and dispersion of air for the visible spectrum, I, 242.
- Barrentine, *B. F.* See Geiger, *M.*
- Barrer, *R. M.*, permeation, diffusion, and solution of gases in organic polymerides, I, 317. Activated diffusion in membranes, I, 317. Gas flow in solids, I, 466. Permeability of metal membranes to diatomic gases, I, 560.
- Barret, *H. P.*, and Culp, *T.*, protection of microscopic mounts for mailing, III, 221.
- Barrett, *E.*, gravimetric method for serum-protein and serum-albumin, III, 356.
- Barrett, *H. M.*, and Johnston, *J. H.*, fate of trichloroethylene in the organism, III, 616.
MacLean, *D. L.*, and McHenry, *E. W.*, experiments with an "antinecrotic" material prepared from liver, III, 149.
- Barrett, *J. F.* See Robertson, *John Douglas*.
- Barrie, *M. M. O.*, vitamin-E deficiency in the rat. III. Fertility in the female, III, 169. Vitamin-E deficiency in the suckling rat, III, 292. Effect of vitamin-E deficiency on the rat, III, 605.
- Barrillon, and Woog, *P.*, spreading of oil on surface of water, I, 316.
- Barriol, *J.*, modes of vibration of normal aliphatic chains, II, 353.
- Barron, *D. H.*, and Matthews, *B. H. C.*, dorsal root potentials, III, 246. Dorsal root reflexes, III, 370.
See also Barcroft, *J.*
- Barron, *E. S. G.*, cellular oxidation systems, III, 606. Biological oxidations and anoxaemia, III, 662.
- Brumm, *H. J.*, and Dick, *G. F.*, ascorbic acid in the blood and urine after intravenous injection of sodium ascorbate, III, 167.
and Lyman, *C. M.*, biological oxidations. XI. Metabolism of pyruvic acid by animal tissues and bacteria, III, 301.
- Barrons, *K. C.*, nature of root-knot resistance [in bean plants], III, 1111.
- Barrow, *F.*, and Atkinson, *R. G.*, resolution of inactive alcohols by means of their esters with tartranilic acid, II, 239.
and Thorneycroft, *F. J.*, *N*-oximinoethers. IV. Formation of oximinoethers in the Ehrlich-Sachs reaction. V. Stereoisomeric *N*-aryl ethers of oximinophenylacetone, II, 324.
- Barrow, *R. F.*, ultra-violet band systems of silicon monoselenide and monotelluride, I, 238.
and Jevons, *W.*, band spectrum of silicon monosulphide and its relation to the band spectra of similar molecules, I, 178.
- Pearson, *T. G.*, and Purcell, *R. H.*, existence of methylene in hydrocarbon reactions, II, 465.
- Barry, *J. G.* See Johnson, *T. H.*
- Barry, *T. A.* See Burgdorf, *A. L.*
- Barry, *V. C.*, constitution of laminarin; isolation of 2:4:6-trimethylglucopyranose, II, 409.
- Barschall, *H. H.*, Harris, *W. T.*, Kanner, *M. H.*, and Turner, *L. A.*, penetrating β -particles from uranium activated by neutrons, I, 393.
See also Ladenburg, *R.*
- Barsonm, *G. S.* See Alam, *M.*, Ambache, *N.*, and Anrep, *G. V.*
- Bartelheimer, *H.*, vitamin-C and diabetes mellitus, III, 167. Neurogenic diabetes mellitus, III, 372. Hyperostosis frontalis interna and pituitary diabetes, III, 474. Hypophyseal diabetes, III, 906.
- Bartelheimer, *H.*, anterior pituitary and diabetes, III, 906. Internal hyperostosis of frontal bone in hypophyseal diabetes, III, 1047.
and Afendulis, *T. C.*, anti-allergic action and liberation of histamine in insulin shock, III, 140.
- Bartell, *F. E.*, surface-active agents, I, 140.
- Bartels, *E.* See Schleede, *A.*
- Bartels, *E. C.*, liver function in hyperthyroidism, III, 138. Sulphanilamide in undulant fever, III, 502. Treatment of gout with low-fat high-carbohydrate diet, III, 925.
and Haggart, *G. E.*, osteoporosis in hyperthyroidism, III, 376.
- Barth, *F.*, relation between radiological and electrocardiographic symptoms of myocardial lesions, III, 123.
- Barth, *T. F. W.*, radium and petrology of granites of Finland, I, 288. Crystal structure of the pressure modification of potassium nitrate, I, 513.
- Barthe, *A.* See Astruc, *A.*
- Bartholomew, *R. A.*, pathology of the placenta, III, 266.
- Bartholomew, *R. J.*, wet ashing of urine, III, 154.
- Bartlett, *J. H., jun.*, stopping power of mercury and of nitrogen for cosmic-ray electrons, I, 351.
and Watson, *R. E.*, elastic scattering of fast electrons by heavy elements, I, 594.
- Bartlett, *J. W.* See Hathaway, *I. L.*
- Bartlett, *K. A.*, and Herbine, *R. H.*, bioassay of phenolphthalein using rhesus monkeys, III, 1003.
- Bartlett, *P.* See Gaehler, *O. H.*
- Bartlett, *P. D.*, mechanism of solvolytic reactions of organic halides and the use of activity coefficients in the equation for a reaction velocity, I, 476.
and Cohen, *S. G.*, cleavage of substituted dibenzoylmethanes on bromination, II, 216.
- Bartlett, *R. G.*, Hart, *L. E.*, and McClelland, *E. W.*, preparation and reactions of some arylsulphonylbenzothiazolones, II, 348.
- Bartlett, *R. M.* See Coller, *F. A.*
- Bartley, *S. H.*, factors in brightness discrimination, III, 837.
- Bartoli, *M. A.* See Moruzzi, *Giovanni*.
- Bartolini, *B.* See Michetti, *G.*
- Barton, *C. A.* See Whitaker, *M. D.*
- Barton, *H. A.* See Lampson, *C. W.*
- Barton, *L. V.* See Schroeder, *E. M.*
- Barton, (*Miss*) *M. X.* See Bachmann, *W. E.*
- Bartorelli, *C.*, Lapique's non-polarisable electrode, III, 734. P.d. of lesions, III, 785. Combination between strontium and proteins in solution. I. and II., III, 785. Hetero-chronic curare action of quaternary ammonium salts. I. and II., III, 866.
- Bartoszek, *T.* See Laroche, *G.*
- Bartow, *E.* See Black, *A. P.*
- Bartsch, *H.*, action of veritol on vital capacity, III, 310.
- Barve, *P. M.* See Desai, *B. N.*
- Baschkirova, *E. I.* See Bogdanov, *I. F.*
- Baschtavenko, *V.* See Dain, *B.*
- Bashenova, *M. A.*, tissue culture of frozen cornea, III, 133.
See also Gleiberman, *E. J.*
- Bashour, *J. T.* See Zanetti, *J. E.*
- Basiński, *A.*, coagulation of silver iodide hydrosol, I, 260.

- Basman, J. See Hartmann, A. F.
- Basoglu, M. See Winterstein, H.
- Bass, A. D., experimental comparison of "skin-sterilising" agents, III, 865.
- Bass, C. C., control of "nose-picking" form of cannibalism in young closely confined quail fed raw meat, III, 992.
- Bassani, B., and Cattaneo, C., enzymic activity of protein fractions of serum. III. Maltase and amylase activities in mammals, III, 816.
- Bassen, F. A. See Rosenthal, N.
- Basset, J., fusion of graphite under high pressures of argon, up to 4000 kg. per sq. cm., I, 190. Determination at pressures of 1—11,000 kg. per sq. cm. of an isotherm of tetrahydronaphthalene passing from the liquid to the solid state, I, 191.
- Bassett, H., Henshall, J. H., and Sergeant, G. A., isomorphous replacement in hydrated salts. II. System $\text{NaCl}-\text{CdCl}_2-\text{H}_2\text{O}$ and the formation of solid solutions in the systems $\text{NaCl}-\text{CdCl}_2-\text{NiCl}_2-\text{H}_2\text{O}$ and $\text{NaCl}-\text{CdCl}_2-\text{CoCl}_2-\text{H}_2\text{O}$, I, 323.
- Henshall, J. H., Sergeant, G. A., and Shipley, R. H., isomorphous replacement in hydrated salts. I. Systems $\text{CoCl}_2-\text{CuCl}_2-\text{H}_2\text{O}$; $\text{CdCl}_2-\text{NiCl}_2-\text{H}_2\text{O}$; $\text{CdCl}_2-\text{CoCl}_2-\text{H}_2\text{O}$, I, 323.
- Bassett, J., fusion of graphite under pressures of argon of from 1 to 11,500 kg. per sq. cm.; determination of the triple point and the construction of a provisional diagram for the solid, liquid, and gaseous states of carbon, I, 409.
- Bassett, S. H., Keutmann, E. H., Hyde, H. van Z., and Van Alstine, H. E., metabolism in idiopathic steatorrhœa. II. Effect of liver extract and vitamin-D on calcium, phosphorus, nitrogen, and lipid balances, III, 407.
- Keutmann, E. H., Hyde, H. van Z., Van Alstine, H. E., and Russ, E., metabolism in idiopathic steatorrhœa. I. Influence of dietary and other factors on lipid and mineral balance, III, 388.
- See also Keutmann, E. H.
- Bassi, A. See Ascoli, A.
- Bassière, M., crystalline structure of azides; constitution of the azide anion, I, 244.
- Bassoe, E. See Cashman, R. J.
- Bastedo, W. A., jun., Trenner, N. R., and Webb, T. J., hydration of vitamin-B, III, 74.
- See also Webb, T. J.
- Bastian, A. See Engeland, R.
- Bastianelli, R., referred pain from bone points, III, 569.
- Bastick, R. E. See Atkins, B. E.
- Bastin, E. S., hydrothermal alteration in the rocks of Pigeon Point, Minnesota, I, 164. Nickel-cobalt-native silver ore type, I, 285.
- Bastman, L. See Vartiainen, I.
- Basu, D. See Kar, K. C.
- Basu, K. P., Bose, S. P., Quader, M. A., and De, H. N., available carbohydrate and acid-base balance in pulses, III, 599.
- and De, H. N., nutritional investigation of species of Bengal fish. I. Biological value of the proteins of ruhee (*Labeo rohita*) and hilsa (*Clupea ilisa*). II. Extraction and chemical analysis of the proteins. III. Biological determination of the vitamin-A contents of the liver and body oils, III, 161.
- Basu, K. P., and Haldar, M. K., biological value of the proteins of *Cicer arietinum* (Bengal gram) and *Cajanus indicus* (Arhar) by the balance sheet and growth methods, III, 849. Supplementary relationships between the proteins of pulses and those of milk by the balance sheet and growth methods, III, 849.
- Basu, R. N., blood groups among the Khasis, III, 116.
- Basu, S., and Maitra, A. T., thermal coefficient of rock-salt by X-ray reflexion, I, 135.
- Basu, U. P., salts of alkaloids, II, 92. Diet in relation to copper for infants, III, 302.
- and Das-Gupta, P. K., 4-amino-2-phenylquinoline derivatives, II, 561.
- and Das-Gupta, S. J., acridine derivatives as antimalarials. II, II, 282.
- See also Choudhury, S. C., and De, S. P.
- Batalin, A. C., reaction between sodium peroxide and sulphur monochloride, I, 274.
- and Schtscherbakov, I. A., heat of hydrolysis of sulphur monochloride, I, 324.
- Batchelor, R. C. L., Lees, R., Murrell, M., and Braine, G. I. H., M. and B. 693 in treatment of gonorrhœa, III, 178.
- Bate, A. E., surface tension and angle of contact of mercury in *vacuo*, I, 455. Formula for the change of velocity of sound with temperature, I, 602.
- Bateman, H., aerodynamics of reacting substances, I, 526.
- Bateman, J. B., and Chambers, L. A., rigidity in protein films, and the properties of the force-area curves, I, 140. "Surface elasticity" of protein films. I. Egg-albumin, I, 316.
- Bateman, L. C., Hughes, E. D., and Ingold, C. K., criterion for mechanism of the reactions of alkyl halides with hydroxylic solvents; reactions of benzhydryl chloride, I, 86.
- Bates, D. R., Buckingham, R. A., Massey, H. S. W., and Unwin, J. J., dissociation, recombination, and attachment processes in the upper atmosphere, I, 349.
- Bates, G., Gaby, R. E., and MacLachlan, W., need for prolonged artificial respiration in drowning, asphyxiation, and electric shock, III, 125.
- Bates, G. H., polyplidy induced by colchicine, III, 732, 1111.
- Bates, L. F., and Fletcher, W. P., electrical resistance of ferromagnetic amalgams, I, 559.
- and Prentice, J. H., electrical resistance of nickel amalgams, I, 309.
- and Taylor, G. G., ferromagnetic compounds of chromium, I, 211.
- Bates, R. G., thermodynamics of bivalent electrolytes. III. Zinc iodide in aqueous solution. IV. Cadmium bromide in aqueous solution. V. Heats of formation and entropies of certain zinc and cadmium halides, I, 80, 200, 372. Entropies of aqueous zinc and cadmium ions; heat capacity of zinc ion, I, 201.
- See also Yosburgh, W. C.
- Bates, R. M., three cases of phenylpyruvic oligophrenia, III, 772. Renal dwarfism, III, 843.
- Bates, R. W., Riddle, O., and Lahr, E. L., racial factor in pigeon crop-sac method of bio-assay of prolactin, III, 840.
- Bath, (Miss) J. See Ellis, J. W.
- Bathurst, A. C. See Anderssen, F. G.
- Batjer, L. P., and Degman, E. S., effects of varying amounts of nitrogen, potassium, and phosphorus on growth and assimilation of young apple trees, III, 799.
- Batrak, G. E., action of organs and tissues on blood-adrenaline, III, 377.
- Batterman, R. C. See De Graff, A. C.
- Battistoni, L., micro-analysis of thallium chloride in urine, III, 276.
- Battut, V. See Machebeuf, M. A.
- Batty, J. W., Heilbron, I. M., and Jones, W. Elwyn, polycene series. III, II, 548.
- See also Barraclough, E.
- Batuecas, T., Ramsay and Steele's vapour density measurements on organic compounds, I, 246.
- Baturenko, T. I., peptone shock in dogs, III, 358.
- Baudelet, G. See Olmer, J.
- Baudouin, A., Fischgold, H., Caussé, R., and Lerig, J., theoretical and practical interest of the retino-corneal potential, III, 834.
- and Lewin, J., apparatus for ultrafiltration, I, 434. Properties of membranes for ultrafiltration prepared on [Jena glass] funnels, I, 539. Nature of reducing substances in brain, III, 971. Cellulose acetate membranes for ultrafiltration, III, 1020. Determination of electrolytes in brain ultrafiltrates, III, 1038.
- Baudouy, C. T., absorption of water by ovokeratin of selachians, III, 96. Formation of ovokeratin in *Raja batias*, III, 155. Elastic properties of ovokeratin, III, 785.
- Bauer, action of intrapleural injections of hypertonic glucose solutions in pleurisy and empyema, III, 179.
- Bauer, D. J., vagal reflexes appearing in asphyxia in rabbits at different ages, III, 362.
- Bauer, E., phosphorylations with various co-enzymes, III, 425.
- See also Euler, H. von.
- Bauer, E. S., Chaletzka, F. M., Lvisova, A. W., and Schabad, L. M., inhibition of tumour growth by fractions of extracts of spleen tissue, III, 160.
- Bauer, F. K. See Sciclounoff, F.
- Bauer, G. C., electrometric determination of solubility of hydroxides, I, 252.
- Bauer, H., structure of chromosomes, III, 348.
- Bauer, Hellmut, use of contrast meal for examination of gastro-intestinal motility, III, 1058.
- and Reindell, H., cumulation of digitalis glucosides. V. and VI., III, 862.
- Bauer, Hugo, organic compounds in chemotherapy. I. Derivatives of sulphanilamide. II. Preparation of formaldehydesulphoxylate derivatives of suphanilamide and amino-compounds, II, 208.
- See also Rosenthal, S. M.
- Bauer, J., atypical cases of diseases of the thyroid gland, III, 578.
- and Aschner, B., relationship between endocrinology and neurology, III, 131.
- See also Schittenhelm, A.
- Bauer, J. T., use of solid carbon dioxide in preparation of gross pathologic specimens, III, 1020.
- Bauer, K., explanted organs. II, III, 220. Differentiation of neuro-epithelium in tissue culture, III, 347. Explantation of the spleen, III, 453.

- Bauer, K. H., and Brunner, K., constituents of resins. XI. Resin alcohols of lactucarium, II, 122.
and Seber, L., unsaponifiable constituents of cacao-germ oil, III, 109.
- Bauer, L., taste in aquatic insects, III, 133.
- Bauer, R. (Tübingen), deep X-ray damage to the lung. I., III, 717.
- Bauer, Rolf. See Scheurer, O.
- Bauer, Rudolf, physiology of *Dematium pullulans*, de Bary, III, 521.
- Bauer, S. H., Beach, J. Y., and Simons, J. H., molecular structure of hydrogen fluoride, I, 130.
- Bauer, S. T. See Ralston, A. W.
- Bauer, W. See Hench, P. S., and Ropes, M. W.
- Bauer, Walter (Boston). See Abrams, N. R., Coggeshall, H. C., Drake, T. G., and Rhineland, F. W., jun.
- Bauer, Walther, treatment of nipple wounds with ointment containing follicle hormone, III, 586.
- Bauereisen, E., effect of insulin on carotene-vitamin-A content of liver, III, 582.
- Bauerlein, T. C. See Tsuchiya, H.
- Bauernfeind, J. C., Schumacher, A. E., Hodson, A. Z., Norris, L. C., and Heuser, G. F., new factor required for growth and reproduction in the domestic fowl, III, 170.
- Bauguess, L. C. See McKenzie, F. F.
- Baukloh, W., and Gehlen, K., solubility of hydrogen in tungsten-iron alloys, I, 17.
and Jaeger, F., reduction of tungstic oxide with solid carbon and hydrogen, I, 36.
and Knapp, B., possibilities of diffusion of gases in metals and between two solid phases, I, 71.
and Oesterlen, F., solubility of hydrogen in aluminium and aluminium alloys, I, 69.
- Baum, A. A., Vogt, R. R., and Hennion, G. F., substituted acetylenes and their derivatives. XXXII. Halogenation in reactive solvents. III. Chlorination of vinylacetylene in methanol, II, 400.
- Baum, E., new light source for thermal excitation, I, 221.
- Bauman, L., clinical experience with globin insulin, III, 910.
- Bauman, W. C. See Vance, J. E.
- Baummann, C. A., Jacobi, H. P., and Rusch, H. P., effect of diet on experimental tumour production, III, 989.
Kline, B. E., and Rusch, H. P., heptaldehyde as a tumour inhibitor, III, 280.
and Moore, T., thyroxine and hypervitaminosis-A, III, 1068.
and Rusch, H. P., effect of diet on tumours induced by ultra-violet light, III, 697.
and Stare, E. J., co-enzymes, III, 1010.
See also Lease, E. J., and Rusch, H. P.
- Baummann, E., leucopoietic substance, III, 447.
- Baummann, E. J., and Metzger, N., iodine in pituitary and other tissues, III, 260.
and Sprinson, D. B., hyperparathyroidism produced by diet, III, 909.
- Baumann, W., origin and structure of electrolytically produced aluminium oxide layers, I, 256.
- Baumberger, J. P. See Müller, O. H., and Winkler, R. J.
- Baumgardt, E., measurement of adiabatic elastic constants of crystals by means of ultrasonic waves, I, 360.
- Baumgarten, B., and Brandenburg, C., interaction of sulphur trioxide with salts of mineral oxyacids, I, 211.
- Baumgarten, G., pyridine-3-carboxydiethylamide [nicotindithylamide]; its detection in "Cormed," II, 177.
- Baumgarten, P., simplified writing of electronic formulae, I, 61. Direct synthesis of 3:5-di-iodopyridine, II, 226, 280.
and Dornow, A., synthesis of 2:3-derivatives of pyridine, II, 226.
and Erbe, H., constitution of hydroxylamine and its O-sulphonic acid; pyridine N-oxide-O-sulphonic acid betaine, I, 91.
and Thilo, E., reaction of potassium sulphate and potassium pyrosulphate with sulphur trioxide; potassium dipyrosulphate, $K_2S_3O_{10}$, I, 90.
- Baur, E., formation of formaldehyde by electrolysis of acetate, II, 533. Inhibitors of guaiacum [peroxidase] reaction, III, 870. Inhibitors of catalase and tyrosinase, III, 870.
- Baur, H., magnesium ternary systems, I, 314. See also Edlbacher, S.
- Bawden, F. C., and Pirie, N. W., aggregation of purified tobacco-mosaic virus, III, 208. Purification of insect-transmitted plant viruses, III, 1106.
- Bawn, C. E. H., and Dunning, W. J., chemiluminescence of sodium vapour with organic halides, I, 125.
and Mildred, J., stability of hydrocarbon diradicals and their reactions, II, 465.
- Baxter, G. P., leakage of helium through pyrex glass at room temperature. III, I, 463.
- Guichard, M., Honigschmid, O., and Whytlaw-Gray, R., ninth report of the at. wt. committee of the International Union of Chemistry, I, 169.
- Baxter, J. H., jun. See Robbins, B. H.
- Baxter, J. S., and Boyd, J. D., neural crest of a ten-somite human embryo, III, 346.
- Bay, Z., and Papp, G., nuclear effect and scattering of γ -rays, I, 293.
and Szepesi, Z., intensity distribution in Compton scattering of γ -rays, I, 293.
- Bayer, E. See Lock, G.
- Bayer, F. W., and Philipsborn, E. von, Ipsen's test of arteriolar function, III, 237.
- Bayer, L. See Bühler, F.
- Bayer, L. M., build in relation to menstrual disorders and obesity, III, 586.
- Bayle, E., Amy, L., and Du Noyer, R., bones in the course of fossilisation; determination of their age, III, 762.
- Bayley, D. S. See Van Allen, J. A.
- Bayley, J. H., differential staining methods for formalin-fixed human pituitary gland, III, 958.
- Bayliss, L. E., and Robertson, G. W., visco-elastic properties of lungs, III, 898.
- Baylis, N. S., and Rees, A. L. G., effect of foreign gases on the continuous absorption spectrum of bromine, I, 289, 393. Interpretation of the visible absorption of bromine, I, 548.
See also Aickin, R. G.
- Bazavan, G. See Hagiesco, D.
- Bazemore, M. K., and Williams, J. C., intracutaneous tests for determining susceptibility to whooping cough, III, 1101.
- Bazett, H. C., effect of heat on blood volume and circulation, III, 230. Effect of temperature on the skin, III, 458.
- Bazilevitch, I. M., and Turovets, I. M., effects of low pressures in man, III, 462.
- Bazilevitch, I. V., senility in Abchasian centenarians. I. Age. II. Clinical observations, III, 393.
and Turovets, I. M., senility in Abchasian centenarians. III. Haemodynamics, III, 393.
- Bazin, S. See Régner, J.
- Beach, B. A. See Irwin, M. R.
- Beach, E. F., Erickson, B. N., Bernstein, S. S., Williams, H. H., and Macy, I. G., amino-acids of the post-haemolytic residue of mammalian erythrocytes, III, 553.
and White, A., synthesis of cystine by the albino rat, III, 297.
- Beach, J. R., transmission of fowl lymphomatosis by inoculation, III, 633.
See also Dickinson, E. M.
- Beach, J. Y., and Stevenson, D. P., electron-diffraction investigation of the molecular structures of ethyl chloride, ethyl bromide, isopropyl chloride, isopropyl bromide, methylchloroform, and isocetyl chloride, I, 601.
and Turkevich, A., electron-diffraction investigation of the molecular structures of cyanogen chloride and cyanogen bromide, I, 185. Internal rotation in ethylene chlorobromide and ethylene bromide, I, 186.
See also Bauer, S. H., and Stevenson, D. P.
- Beadle, B. W., Conrad, R. M., and Scott, H. M., composition of uterine secretion in domestic fowl, III, 587.
- Beadle, D. G., and Patterson, H. S., effect of tube-length on the visibility of dust particles with an oil-immersion objective, I, 626.
- Beadle, G. W. See Tatum, E. L.
- Beal, J. M., histological responses of three species of *Lilium* to indolylacetic acid, III, 214.
- Beale, G. H., Robinson, (Lady), Robinson, (Sir) R., and Scott-Moncrieff, R., genetics and chemistry of flower colour variation in *Lathyrus odoratus*, III, 637.
- Beale, S. M. See Pinkerton, H.
- Beals, C. S., evidence for complex structure in lines of interstellar sodium, I, 50. Registering microphotometer, I, 433.
- Beamish, F. E., and Dale, J., determination of palladium by means of potassium iodide, I, 103.
- Beams, J. W., centrifuging of liquids, I, 45. Tubular vacuum-type centrifuge, I, 104. High-speed centrifuging, I, 282. High resolving power ultracentrifuge, I, 494.
and Black, S. A., electrically-driven magnetically-supported vacuum-type ultracentrifuge, I, 224.
and Skarstrom, C., concentration of isotopes by the evaporative centrifuge method, I, 582.
See also Snoddy, L. B.
- Bean, J. W., and Rottschäfer, G., reflexogenic and central structures in oxygen poisoning, III, 125.
- Bean, T. W., and Bohr, D. F., high oxygen effects on isolated striated muscle, III, 368.
- Bean, W. B. See Spies, T. D.
- Bear, R. S. See Schmitt, F. O.
- Beard, A. H. See Norris, E. H.

- Beard, H. H., relation of the liver to creatine-creatinine metabolism, III, 271.
- and Pizzolato, P., effect of parenteral injection of amino-acids and related substances on creatine formation and storage in the rat; theory of the origin of creatine in the animal body, III, 295.
- See also Kelly, C. J., Koven, A. L., and Pizzolato, P.
- Beard, J. W. See Woodhall, B.
- Beard, R. R. See McNaught, J. B.
- Bearden, J. A., determination of e/m from refraction of X-rays in a diamond prism, I, 6. Spectroscopic and free electron values of e/m , I, 298.
- See also Obert, L.
- Bearse, G. E., and Miller, M. W., vitamin-A requirements of white Leghorn pullets during the growing period, III, 73. Effect of varying levels of vitamin-A in the hen ration on the vitamin-A content of egg yolk, on hatchability and chick livability, III, 73.
- See also Miller, M. W.
- Beath, O. A. See Bradley, W. B.
- Beati, S. See Ilari, G.
- Beaton, L. E. See Anson, B. J.
- Beattie, E. M., visual threshold values, III, 753.
- Beattie, J. A., Simard, G. L., and Su, G. J., vapour pressure and critical constants of butane, I, 134. Compressibility of and an equation of state for gaseous *n*-butane, I, 135. Compressibility of gaseous ethane in the high density region, I, 311. Critical constants of ethane, I, 311.
- Beattie, M., and Nicewonger, R., differentiation of bovine and human strains of tuberculosis by method of Bertrand, Bablet, and Bloch, III, 1104.
- Beatty, S. A., trimethylamine oxide content of muscles of Nova Scotia fish, III, 567.
- Beaumont, G. E., and Mason, R. W., unusual case of lead poisoning, III, 413. and Robertson, Jean D., anginal syndrome due to hypothyroidism, III, 559.
- Beauquesne, L. See Paris, René.
- Beauvallet, M., sensitivity of isolated intestinal strip from normal and polynutritive pigeons to acetylcholine, III, 164. Antagonistic action of drugs on fish chromatophores, III, 1002.
- Beaven, G. H., and Jones, J. K. N., molecular structure of pectic acid, II, 242.
- Beavers, E. M. See Owen, (Miss) K.
- Beazell, J. M., Schmidt, C. R., and Ivy, A. C., digestibility of raw potato starch in man, III, 492.
- See also Bachrach, W. H.
- Beazley, C. W., use of Trautz's micro-Dumas method [for determining nitrogen] with the apparatus of Pregl, I, 38. Modified Pregl spiral tube for sulphur and halogen determinations, II, 397.
- Bebb, R. L., metallation of cyclic compounds, II, 292.
- See also Gilman, H.
- Bebbee, M. O., jun. See Schachter, R. J.
- Bebeschin, K. V. See Smorodincev, I. A.
- Beccari, E., pharmacology of Ethiopian aloes. I. Effect on excitability, performance of work, and tonus of intestine *in situ*. II. Effect on absorption and secretion by the large intestine, III, 185. Rates of absorption and elimination of drugs, III, 192.
- See also Chistoni, A.
- Bech, P. F., photographing the "line-test" in vitamin-D determination, III, 1074.
- Béclard, C. See Delaplace, R.
- Bechdel, S. I. See Kennedy, W. L.
- Bechthold, K. See Anthony, A. J.
- Bechthold, W. See Köster, W.
- Beck, A. B. See Underwood, E. J.
- Beck, C. E., and Wyckoff, R. W. G., antigenic stability of Western (U.S.) equine encephalomyelitis virus, III, 208. Venezuelan equine encephalomyelitis, III, 335.
- Beck, G., structure of the proton and neutron, I, 176. Microchemistry of the rare earths, I, 387. Structure of ^{15}N , I, 446. Separation of praseodymium and terbium from mixtures of rare earths, I, 535. Permeability of skin to carbon dioxide and oxygen, III, 1034.
- and Havas, P., dissymmetry of the rupture of uranium, I, 296. Retardation in air of atomic fragments resulting from the explosion of uranium nuclei, I, 399.
- Beck, H., and Krieger, F. H., intracutaneous indophenol test of vitamin-C metabolism, III, 1072.
- and Schorlemmer, W., vitamin-C tolerance test, III, 288.
- and Stranbe, G., micro-analysis of body fluids for lead, III, 640.
- See also Straube, G.
- Beck, J. See Sturm, A.
- Beck, Jürgen, construction of a 10-kw. rotating-anode X-ray tube, and investigation of the structure of salt solutions, I, 463.
- Beck, J., jun., and Sookne, A. M., electrophoresis of collagen, I, 564.
- Beck, N. See Moore, C. R., and Newton, W. H.
- Beck, R. C., Laughlen test for syphilis, III, 631.
- Beck, S., failure of acute and subacute inflammation to influence carcinogenesis with 3:4-benzopyrene, III, 396.
- See also Peacock, P. R.
- Beck, W. A., chloroplastin symplex and the formation of chlorophyll, III, 534.
- Schocken, K., and Donnelly, M. W., cell enlargement in hypocotyl of *Helianthus annuus*, III, 635.
- and Schroeder, M. P., relation of pigment production to size of seeds, III, 636.
- Beckel, A. C., Sharp, A. G., and Milner, R. T., apparatus for determining moisture by the distillation method, I, 582.
- Becker, A., selenium photo-elements, II, 1, 452.
- Becker, Erich. See Schöpf, C.
- Becker, E. C. S., glutathione content of preserved blood, III, 12.
- Becker, E. R., and Waters, P. C., dried skim milk and other supplements in the ration during caecal coccidiosis of chicks, III, 992. Biological assay of feeding-stuffs in a basal ration for *Coccidium*-growth-promoting substance. III. Dried fish meal, lucerne meal, and white wheat flour, III, 1066.
- and Wilcke, H. L., influence of dried buttermilk in rations on fatality with coccidiosis in clucks, III, 170.
- Becker, F. T., production of positive serological reactions in rabbits and subsequent reactions of the serologically altered animals to inoculation with *Treponema pallida*, III, 1013.
- Becker, G. See Koster, W.
- Becker, Heinrich. See Wohlfeil, T.
- Becker, H. O. See Englis, D. T.
- Becker, J. E. See Day, H. G.
- Becker, M. See Lenkeit, W.
- Becker, R. A. See McLean, W. B.
- Becker, S. W., and Obermayer, M. E., treatment of syphilis by a combination of bismuth saucyate and a new synthetic arsenical, III, 1003.
- See also Ginsberg, J. E., Obermayer, M. E., and Stewart, C. D.
- Becker, T. J. See SeEVERS, M. H.
- Becker, W. A., vital cytoplasmic and nuclear staining, III, 112. Structure and double refractivity of chromosomes, III, 348.
- Beckermann, F., radiography of liver and spleen by "aimed" intravenous injection of iodine, III, 273.
- Beckeröwna, Z., crystallisation velocity of aluminium and gold, I, 185.
- Beckert, W., protamine-zinc-insulin treatment of diabetes mellitus, III, 582. Action of baker's yeast in diabetes mellitus, III, 1078.
- Becket, C. See Arnot, F. L.
- Beckh, W., and Barnett, C. W., treatment of early syphilis, III, 865.
- and Kulchar, G. V., treatment-resistant syphilis, III, 1088.
- Becking, L. G. M. B. See under Baas-Becking, L. G. M.
- Beckman, J. W., and Loeb, L. B., sign preference in cloud condensation on gaseous ions, I, 51.
- Beckmann, C. O., and Landis, Q., mol. wt. of β -amylase from corn starch by means of the ultra-centrifuge, II, 409. Mol. wt. of α -amylodextrin (erythrogranulose) from potato starch, II, 409.
- Beckmann, S. See Komppa, G.
- Beckmann, U. See Schroder, Wilhelm.
- Beckord, O. C. See Washburn, E. R.
- Becks, H., human saliva. IV., III, 61. and Wainwright, W. W., human saliva. III., III, 61.
- Becquerel, J., and Handel, J. van den, metamagnetism, I, 188.
- Becquerel, P., revivifying of mosses frozen in liquid nitrogen and reversibility of their protoplasmic syneresis, III, 798.
- Bedell, S. G., orange granules of sensory cells of lateral line organs of amphibian larva, III, 676.
- Bedford, C. L., morphology and physiology of a *Penicillium* sp. tolerant to saturated copper sulphate, III, 426.
- Bedford, D. E., left ventricular failure, III, 821.
- Bedford, R., N'Goureyama meteoric iron, I, 162.
- Bedford, T. H. B., effect of variations in carbon dioxide tension on rate of absorption of saline solution from subarachnoid space, III, 573. Monosaccharides and water absorption from subarachnoid space, III, 1039.
- Bednarczyk, W., and Marchlewski, L., reducing sugars. V., I, 58. Absorption of ultra-violet light by organic substances. XLIX. [Sorbosc.] L. Some azines, I, 299. Azines, II, 128.
- Beebe, G. W., and Gamble, C. J., effect of contraception of human fertility, III, 380.
- Beebe, R. A., and Dowden, D. A., heats of adsorption of gases by chromic oxide at low temperatures, I, 72.

- Beecher, H. K., fatal toxic reactions associated with tribromoethanol anaesthesia, III, 87.
- McDonough, F. K., and Forbes, A., similarity of effects of barbiturate anaesthesia and spinal trans-section, III, 466.
- Beeck, O., and Wheeler, A., activated adsorption of nitrogen on iron at 23° and 100°, and ammonia synthesis, I, 560.
- Beeking, P., use of spasmocibalgin in gynaecology and obstetrics, III, 411.
- Beeman, W. W., and Friedman, H., X-ray K absorption edges of the elements Fe (26) to Ge (32), I, 589.
- Beer, A. G., leucocyte regulation, III, 4. White cell count in parabiotic animals, III, 891.
- and Richard, R., blood-sugar regulation after extirpation of cerebral hemispheres, III, 902.
- Beese, N. C., measurement of activation and decay of luminescent zinc silicate, I, 280. Response of several fluorescent materials to short-wave-length ultra-violet radiations, I, 550.
- Beesemans, A., De Wilde, H., and De Moor, A., effect of hibernation on syphilis in the hamster and hedgehog, III, 206.
- Beeson, C. M., and Yost, D. M., equilibrium dissociation and thermodynamic constants of nitrosyl chloride; comparison with spectroscopic data, I, 143. Thermodynamic constants of bromine chloride; equilibrium reaction between nitric oxide, bromine, chlorine, nitrosyl bromide and chloride, and bromine chloride, I, 471.
- Beeson, P. B. See Goebel, W. F., Hoagland, C. L., and MacLeod, C. M.
- Beeuwkes, H., proteolytic enzymes of *Vibrio cholerae* and *El Tor vibrio*, III, 878.
- Beguin, A. E., and Hamilton, C. S., arsenicals derived from *m*-aminophenol, II, 190.
- See also Georgi, C. E., and Washburn, E. R.
- Behagel, O., and Hofmann, K., aryl selenohalides. VI. Diphenylselenohalides and a new method of formation of diphenylselenide. VII. Organic selenide dihalides, II, 234, 293.
- and Ratz, H., fission of ketosulphidocarboxylic acids. III. Alkaline hydrolysis of ketosulphidocarboxylic acids and its dependence on the structure of the molecule, II, 374.
- Behnke, A. R. See Lennox, W. G.
- Behounek, F., and Kletschka, J., ionisation of air in an air-conditioned building, I, 52.
- Behounek, O. See Schacherl, F.
- Behr, E., renal changes following renal vein thrombosis, III, 693.
- Behrens, M., distribution of lipase and arginase between the nuclei and protoplasm of the liver, III, 692.
- See also Fentgen, R.
- Behrens, O. See Du Vigneaud, V.
- Behrens, O. K., and Bergmann, M., co-substrates in proteolysis, II, 470.
- Behrnt-Jensen, H. See Schales, O.
- Beiglböck, W., therapy of bronchial asthma, III, 82. Water metabolism and internal secretion, III, 135.
- and Dussik, T., physiology of hypoglycæmic shock in treatment of schizophrenia, III, 141.
- See also Posatti, F.
- Beilenson, B., and Hamer, (Miss) F. M., simple cyanines, II, 127.
- Beiler, A., and Schratz, E., conductometric determination of carbon dioxide, I, 385.
- Beilly, J. S., p_H changes in vaginal fluid in the rat during an oestrous cycle, III, 979. Determination of p_H of vaginal fluid as a method of observation in administration of oestrogens, III, 979.
- Beischer, D., determination of size of crystallites in metal and metallic oxide smokes with X-ray and electron diffraction diagrams and with electron microscope photographs, I, 160. Forms of deposited iron during thermal decomposition of iron pentacarbonyl in the gaseous phase, I, 334.
- Bekturov, A., influence of temperature on the partition coefficient of saturated monocarboxylic acids between water and organic solvents, I, 413.
- Belak, S., formation of immune substances as a function of vegetative nervous system, III, 667.
- Beland, I. L., Moe, G. K., and Fischer, M. B., use of aluminium metal in contact with blood in perfusion systems, III, 20.
- Belcher, D. [with Shedlovsky, T.], conductance and ionisation constants of propionic and *n*-butyric acids in water at 25°, I, 25.
- Belcher, R. See Godbert, A. L.
- Beldes, E. J. See Mann, F. C.
- Beiding, H. S. See Field, J., jun.
- Belenki, L. I., laboratory apparatus for electrometric analysis, I, 104.
- Belfer, S. See Eder, H.
- Belfiori, O., catalytic action of various kinds of ferric hydroxide in presence of promoters, I, 33.
- Belfrage, D. See Hewer, C. L.
- Belgova, M. A. See Izmailov, N. A.
- Belikova, M. V. See Salkind, J. S.
- Belinfante, F. J., new form of the baryton equation and related questions, I, 237.
- Belitzer, V. A., mutual relation of processes yielding energy in the living cell, III, 1010.
- Bell, A. See Allen, C. F. H.
- Bell, D., infantile oedema: treatment by adrenaline, III, 377.
- Bell, D. J., and Harrison, K., micro-method for the determination of the isopropylidene group in sugar derivatives, II, 195.
- See also Bacon, J. S. D.
- Bell, E. T., clinical and pathological study of subacute and chronic glomerulonephritis, including lipid nephrosis, III, 274.
- Bell, F. N. See Irwin, M. R.
- Bell, (Miss) F. O. See Astbury, W. T.
- Bell, G. E. See Kaye, G. W. C.
- Bell, G. H., human fetal electrocardiogram, III, 360. Movements of unloaded rabbit uterus, III, 583.
- and Weir, J. B. DeV., general purpose speedometer, III, 952.
- Bell, J. F. See Griggs, D.
- Bell, M. E., probability of ionisation of mercury atoms by collision with low-velocity electrons, I, 168.
- Bell, P. H., spectrographic determination of trace elements in biological ash, III, 222.
- Bell, R. K. See Scherrer, J. A.
- Bell, R. P., collision factors in solution, I, 143.
- and Burnett, R. Le G., acid-base catalysis in gas reactions. II. Decomposition of various organic compounds, I, 328.
- Bell, R. P., and Lidwell, O. M., acid catalysis in non-aqueous solvents. VII. Rearrangement of *N*-bromobenzanilide in chlorobenzene, I, 478.
- Lidwell, O. M., and Wright, J., acid catalysis in non-aqueous solvents. VI. Racemisation of phenylmethylacetophenone and phenylisobutylacetophenone in various solvents, I, 33.
- Belli, W. B. See Johnson, E. P.
- Bellair, P., heavy elements in desert sand, I, 109.
- Bellea, L. See Vladesco, R.
- Bellet, S. See Wood, Francis C.
- Belleuvre, G., physiological action of pyrethrins on invertebrates, III, 417.
- Bellingham, R. van, freezing of solutions as a method of studying problems in pure chemistry. XII. Polymorphism in homologous series of saturated normal alkyl acetates and ethyl esters of saturated normal fatty acids, I, 134.
- Bellini, L., and Filippin, S., effect of sympathetic and parasympathomimetic drugs on intestinal absorption of fatty acids, III, 842.
- See also Filippin, S.
- Bellone, A., structure of the cervical sympathetic in various mammals, III, 132.
- Bellows, J. G., and Chinn, H., distribution of sulphanilamide in the eye, III, 773.
- See also Gifford, S. R., and Rosner, L.
- Bellows, R. T., time factors in water drinking in dogs, III, 694.
- Belluc, S., Chaussin, J., Laugier, H., and Ranson, T., different forms of urinary acidity produced during 24 hours, III, 915.
- Chaussin, J., Lescœur, L., and Ranson, T., action of Vichy water, administered in different ways, on the urinary constituents of normal man; changes in phosphate metabolism, III, 392.
- Belogurov, A., variation in structure of alimentary canal in sturgeons in connexion with nutrition, III, 592.
- Belonoschkin, B., life expectation of human spermatozoa, III, 688.
- Belopolski, A. P., Taparova, A. A., and Schulgina, M. N., physico-chemical analysis, in connexion with sulphuric acid treatment of phosphates; transformations of calcium sulphate crystal hydrates in presence of phosphoric acid at 80°, I, 380.
- Belov, N. V., isomorphic substitutions in the apatite group, I, 284. Classification of closest and close packings, I, 456.
- Belt, T. H., liver necrosis following burns simulating lesions of yellow fever, III, 692. Silicotic nodules of spleen, III, 867.
- Belton, J. W., surface tension and thixotropic properties of Putnam clay suspensions, I, 469. Capillary properties of α -amino-acids, I, 608. Effect of salts on surface tensions of gelatin solutions, I, 609.
- Belval, H., Amaryllidaceæ and Liliaceæ; carbohydrate reserve of the onion and tuberous plants, III, 536.
- See also De Cugnac, A.
- Bemmels, C. See Reyerson, L. H.
- Ben-Asher, S., metastatic bone carcinomatosis associated with hyperparathyroidism, III, 579.
- Ben Khaled, A. See Vignoli, L.
- Benacchio, L. See Schroeder, H.
- Benaglia, A. E. See Co Tui, F. W.

- Bénard, H., and Merklen, F. P., value of transcutaneous compression of carotid sinus, III, 966.
- Tissier, M., Dermer, L., Bareillier, G., and Péguignot, H., hyperglycemia produced by asphyxia in perfused liver, III, 484, 986.
- Bénard, J., decomposition of ferrous oxide and its solid solutions, I, 576.
- and Chaudron, G., solid solutions of cubic ferric oxide obtained by oxidation of substituted magnetites, I, 155.
- Benazzi, M., species-specificity of the anterior pituitary gonadotropic hormone, III, 47. Effect of environment on structure of the mammalian thyroid gland, III, 138.
- Benda, R., and Debray, C., local changes following sodium salicylate injections into bone marrow, III, 618.
- See also Chiray, M.
- Bender, H. L., molecular and cybotactic weight measurements of resinous and crystalline materials, I, 460.
- Bender, M. B., sensitised pupillary dilator and facial muscles as indicators of sympathetic and parasympathetic substances in blood, III, 36.
- Bender, O., elasticity measurements on alkali metal single crystals at low temperatures, I, 187.
- Bender, R. C. See Supplee, G. C.
- Bendich, A. See Kremer, C. B.
- Bendien, W. M., and Creveld, S. van, hamophilia. IV., III, 117. Factors in blood coagulation, in relation to hamophilia, III, 648.
- See also Snapper, I.
- Bendix, G. H. See Kolthoff, I. M.
- Bendix, H. See Ferber, E.
- Benedek, L., and Lebozky, T., clinical recognition of Pick's disease, III, 669.
- Benedetti-Pichler, A. A., analytical balances in quantitative micro-analysis, I, 341.
- Cefola, M., and Waldman, B., Warde's method for the titration of carbonates, I, 487.
- Crowell, W. R., and Donahoe, C., qualitative separations on a micro-scale; separations in the alkaline-earth group, I, 217.
- See also Adams, J. I., Alstodt, B. S., and Niederl, J. B.
- Benedicks, C., diagram permitting graphical representation of the composition of multiple systems, such as light alloys, I, 147.
- Benedict, C. G. See Benedict, F. G.
- Benedict, E. B. See Jones, C. M.
- Benedict, F. G., Benedict, C. G., Lee, R. C., and Lee, H. B., maximum temperature of expired air as a rapid measure of human body temperature, III, 393.
- See also Ritzman, E. G.
- Benedict, M., properties of saturated aqueous solutions of potassium chloride at temperatures above 250°, I, 463.
- Benelli, R., effect of β -hydroxy- β -p-hydroxyphenylethylmethylamine [sympathol] on bronchial muscle, III, 181.
- Benetato, G., Munteanu, N., and Oprean, R., effect of hormones on the colloidal state of tissue-proteins, III, 320. Effect of age on colloidal state of tissue-proteins, III, 320. Influence of age and hormones on colloidal state of tissue-proteins, III, 676.
- and Oprisiu, C., physiology of the tonsils; effect of tonsil extracts on the basal metabolism of rats, III, 78.
- Benfenati, A. See Brillanti, F.
- Benford, F., temperature corrections in optical pyrometry, I, 580.
- Benford, G. A., Kaufmann, H., Khambata, B. S., and Wassermann, A., mechanism of additions to double bonds. IX. Kinetics of the association of cyclopentadiene in carbon tetrachloride solution and in the pure liquid state, I, 269.
- and Wassermann, A., mechanism of additions to double bonds. VI. Kinetics of gaseous associations. VII. Chemical equilibrium in solution and in the gaseous state. I, 261, 268.
- Bengtsson, G., Melin, K., and Petré, T., blood volume of adrenal cortex of trained guinea-pigs, III, 912. Technique of quantitative anatomical investigations of adrenals, III, 912.
- Benham, R. W., cultural characteristics of *Pityrosporum ovale*—a lipophilic fungus, III, 1098.
- See also De Lamater, E. D.
- Benham, W. E., classical wave functions for moving corpuscles, I, 56.
- Benignus, E. L. See Sielig, M. G.
- Benington, F. See Worrall, D. E.
- Benjamin, H. R. See Gordon, H. H.
- Benjamin, J. E., Landt, H., and Culver, L. R., the body as a volume conductor and its influence on electrical field of the heart, III, 16.
- Benjamin, J. W., nucleus of the oculomotor nerve with special reference to innervation of the pupil and fibres from the pretectal region, III, 668.
- Benjamin, M., and Jenkins, R. O., surface migration of barium, I, 60. Migration of barium on molybdenum, I, 245. Surface structures of possibly atomic dimensions using autoelectronic or "field" omission from fine metal points, I, 348.
- Benn, E. C., sulphanilamide in scarlet fever, III, 1082.
- Benndorf, G. See Wirth, D.
- Bennet, J. P., and Skoog, F., relation of growth-promoting substances to the rest period in fruit trees, III, 214.
- Bennet-Clark, T. A., and Bexon, D., expression of vacuolar sap, III, 1108.
- Bennett, A. E., convulsive (pentamethylenetetrazole) shock therapy in depressive psychoses, III, 249. Horse serum neuritis, III, 569.
- See also Hamsa, W. R.
- Bennett, B. L., Baker, F. C., and Sellards, A. W., behaviour of virus of yellow fever in the mosquito, *Aedes triseriatus*, III, 105.
- See also Tyzzer, E. E.
- Bennett, B. T., jun., and Fitzpatrick, C. P., fractures of the spine complicating metrazol therapy, III, 832.
- Bennett, F. D., degassing of hydrogen-charged palladium, I, 607.
- Bennett, G. A. See Rhineland, F. W., jun., and Ropes, M. W.
- Bennett, G. M., hydroxy-by-products in aromatic nitration, II, 16.
- and Gudgeon, H., formation of large ring monosulphides from halogenated sulphides with extended carbon chains, II, 3.
- and Jones, B., mesomorphism and polymorphism of *p*-alkoxy-benzoic and -cinnamic acids, II, 214.
- and Vernon, I. H., reversible replacement of aromatic halogen atoms, II, 13.
- Bennett, M. A., metabolism of sulphur. VII. Quantitative study of replaceability of L-cystine by sulphur-containing amino acids in the diet of albino rats, III, 707.
- Bennett, R. A., case of meningococcal meningitis treated with soluseptasine, sulphonamide, and serum, III, 927.
- Bennett, R. L. See Prickman, L. E.
- Bennett, T. I., and Gill, A. M., colloidal aluminium hydroxide in treatment of peptic ulcer, III, 592.
- Bennowitz, K., and Rotger, H., viscosity of solids. II. Thermal damping for bending vibrations, I, 135. Plastic-elastic state, I, 411.
- Beenhold, H., blood-colloids and transport process in the organism, III, 118.
- Kylin, E., and Ruzsnyák, S., die Eiweisskörper des Blutplasmas; (the proteins of the blood plasma), III, 232.
- Bennhold-Thomsen, C., aetiology of infantile scurvy, III, 496.
- Benning, A. F., and McHarness, R. C., thermodynamic properties of chlorofluoro-methanes and -ethanes, I, 410.
- See also Tanner, H. G.
- Bennister, H. L., and King, A., chemisorption on charcoal. XII. The isoelectric point, I, 21.
- Benoit, G., hydroxyalkylhydrazines, II, 248.
- See also Schinzel, T.
- Benoit, J., eunuchoidism in domestic cock with hypoplastic or absent interstitial testicular tissue, III, 141. Nature of gonads developed in ovariectomised fowls, III, 144. Role of the eyes and oculo-pituitary pathway in gonad stimulation by light in the duck, III, 378.
- and Kehl, R., centromeres present during spermatogenesis in the mouse, III, 984. Nervous pathway of pituitary-stimulating photoreceptors in domestic duck, III, 1045.
- and Ney, G., dielectric polarisation of solutions of methyl alcohol in 1:4-dioxan; dipole moment of methyl alcohol, I, 453.
- Benotti, J. See Thannhauser, S. J.
- Benrath, A., and Neumann, E., system cobalt chloride-sodium chloride-water between 25° and 100°, I, 81. Mixed crystals in the vitriol series. V., I, 473.
- and Ritter, G., reciprocal salt pair $\text{CoSO}_4 + (\text{KCl})_2 = \text{CoCl}_2 + \text{K}_2\text{SO}_4$. I, I, 323.
- and Schiffrs, B., system cobalt bromide-ammonium bromide-water between 0° and 100°, I, 81.
- Benrath, H., system cobalt chloride-lithium chloride-water, I, 81.
- Bensley, C. M., comparison of methods for demonstrating glycogen microscopically, III, 545.
- Bensley, E. H. See Rabinowitch, I. M.
- Bensley, R. R., plasmosin: the gel- and fibre-forming constituent of the protoplasm of the hepatic cell, III, 484.
- Bensley, S. H., solubility studies of secretion granules of the guinea-pig pancreas, III, 644.
- and Woerner, C. A., effects of continuous intravenous injection of an extract of the alpha cells of the guinea-pig pancreas on the intact guinea-pig, III, 593.

- Bent, H. E., movement of water from concentrated to dilute solutions through liquid membranes, I, 140.
- Forbes, G. S., and Forziati, A. F., normal electrode potential of caesium, I, 266.
- Benthin, W., disturbances of the post-partum period, III, 687.
- Benzinger, T., researches on respiration and gas metabolism under conditions of oxygen lack and low barometric pressure, III, 24.
- Benzoni, G., toxin of *B. perfringens*. I. Effect in laboratory animals. II. Lecithin, III, 525.
- Beppu, I. See Okano, K.
- Bequignon, R. See Levaditi, C.
- Ber, A. See Flaks, J.
- Beraud, P., radio-races of yeast. I. Physiology of yeasts cultivated on solid media, III, 789. Effect of nitrogenous nutrition on respiration and fermenting power of baker's yeast, III, 1010.
- See also Lacassagne, A.
- Berberian, D. A., vaccination and immunity against oriental sore, III, 792.
- Berberich, J., treatment of tonsillitis with bismuth, III, 189. Blindness after injection of thorotrast into the septum mucous membrane, III, 189.
- Berblinger, W., pathogenesis of disease of the pituitary-diencephalic system, III, 46. Diabetes insipidus in a case of fibrous atrophy of the neurohypophysis after an accident, III, 49.
- Berck, M. See Ottenberg, R.
- Berconsky, I. See Cossio, P.
- Berczeller, A. See Besredka, A.
- Berenblum, Chain, E., and Heatley, N. G., metabolic activities of small amounts of surviving tissues, III, 295.
- and Wormall, A., immunological properties of proteins treated with $\beta\beta'$ -dichlorodiethyl sulphide (mustard gas) and $\beta\beta'$ -dichlorodiethylsulphone, III, 338.
- See also Heatley, N. G.
- Berenblum, L. S. See Delimarski, J. K.
- Berens, C. See Chapman, G. H.
- Berenstein, S., and Birkhäuser, H., determination of glutathione in blood, III, 357.
- Beres, D., effect of thorotrast on ependymal lining and related parts of brain, III, 833.
- and Schatia, V., heredity in disease, III, 66.
- Berestecky, See under Berestzky.
- Berestzky, V., shape of the β -spectrum in the case of the forbidden transitions, I, 442.
- See also Alichanian, A. I.
- Beretta, A., cardiac sensitivity to small doses of thyroxine. I. Haemodynamic experiments in compensated, valvular deficiency, III, 138. Antidiabetic action of copper sulphate, III, 189. Influence of insulin on K/Ca balance during hypoglycaemia, III, 261.
- Berezkina, L., interrelation between pre-existing fibres in explanted tissue and fibres formed anew *in vitro*, III, 957.
- See also Rumjantzev, A.
- Berg, A., cause of the inhibitory action of saliva on growth of capsulated bacteria, III, 530.
- Berg, A. (Göteborg). See Hedvall, J. A.
- Berg, C. P. See Totter, J. R.
- Berg, F., corneal astigmatism and total astigmatism, III, 1040.
- Berg, J. ter, structure of optically active salts and their racemates, I, 182.
- Berg, L. M. van den, action of erythrophleoin on the heart, III, 505.
- and De Boer, electrocardiographic alternation of frog's ventricles after poisoning with erythrophleoin, III, 895. Method for examining action of digitalis and digitaloids on contractility of heart muscle, III, 931.
- Berg, M. E. See Kammer, A. G.
- Berg, S., simple apparatus and technique for gas analysis, III, 462. Unreliability of oxalated blood in determination of erythrocyte sedimentation rate, III, 550.
- Berg, W. F., latent image formation at low temperatures, I, 330.
- and Mendelssohn, K., photographic sensitivity and reciprocity law at low temperatures, I, 89.
- Bergel, F., and Todd, A. R., two derivatives of estrone, II, 75.
- See also Karrer, P., and Work, T. S.
- Bergen, H. van, precision measurement of lattice constants by a compensation method, I, 340.
- Berger, A. See Lindner, J., and Shriner, R. L.
- Berger, E., and Klemm, A., Jena dispersion filter, I, 389.
- Berger, E. O., influence of prostigmine on the normal and infected small intestine of the guinea-pig, III, 270.
- Berger, Gerhard (Berlin). See Mannich, C.
- Berger, Gerhard (Ludwigshafen). See Keil, W.
- Berger, H., capability of existence and stability of hydrazino-acids, II, 249.
- Berger, J., and Delahaye, G., slight respiratory accidents during etherisation, III, 87.
- Berger, Julius, and Johnson, M. J., activation of peptidases by metals, III, 1096. Leucyl-peptidases of malt, cabbage, and spinach, III, 1096.
- See also Woolley, D. W.
- Berger, J. A. See Sidhu, S. S.
- Berger, R. See Paget, M.
- Berger, S. See Cohn, G.
- Berger, W., overaction of the pancreas, III, 64. Gold treatment of pulmonary tuberculosis, III, 779.
- and Grill, H., pernicious anaemia in chronic carbon monoxide poisoning, III, 7.
- and Leubner, H., treatment of various types of bronchitis, III, 613.
- Bergeret, P., and Giordan, P., pressure of cerebrospinal fluid in experimentally reduced atmospheric pressure, III, 374. Effects of instantaneous decompression on the animal, III, 1034.
- Bergerhoff, W., silicosis in metal grinders, III, 95. X-Ray picture of lungs of metal grinders, III, 782.
- Bergh, G. S., bile salts in treatment of peptic ulcer, III, 690.
- Berghe, L. van den, Gavrilov, W., and Bobkoff, G., tissue culture of bone marrow, III, 2. Hanging drop culture of human lymphocytes, III, 4.
- Berglund, H., and Frisk, A. R., protein elimination, especially in induced proteinuria, III, 276.
- Bergman, A. G., and Kuznetsova, M. N., physico-chemical analysis of reactions of organic amides with acids. I. Reaction of carbamide with fatty acids. II. Thermal analysis of the ternary system carbamide-acetic acid-water. I, 524.
- See also Feigelson, I. B., and Natzvlischvili, E. R.
- Bergman, A. J., and Turner, C. W., comparison of guinea-pig and chick thyroid in assay of thyrotropic hormone, III, 677.
- Bergman, H., and Drury, D. R., relationship of kidney function to the glucose utilisation of the extra-abdominal tissues, III, 300.
- Bergman, H. C. See Glass, S. J.
- Bergmann, E., dimerisation of 3-phenylindene, II, 14. Synthesis of six isomeric $C_{22}H_{20}O_2$ acids, II, 212. Synthetic experiments in the equilenin series, II, 321. Configurational relationships in the steroid series, II, 322. Dimerisation reactions of unsaturated hydrocarbons, II, 472. Pinacols and the pinacolone rearrangement. II, II, 480.
- and Bergmann, F., syntheses and reactions of substituted α -naphthaquinones, II, 27. Thermolysis of cholesteryl chloride, II, 362.
- and Berlin, T., determination of the fine structure of aromatic compounds, II, 66. 9-Phenyl-1:2:3:4-dibenzanthracene, II, 207.
- and Haskelberg, R., lipophilic chemotherapeutics. I, II, 130.
- and Hirschberg, Y., photochemistry of Δ^4 -cholestenone, II, 119.
- and Weizmann, A., phenanthrene syntheses with 2:3-dimethyl- Δ^2 -cyclohexenone, II, 412. Cyclisation of benzylbenzylidenesuccinic acid, II, 548.
- See also Bergmann, F., Henri, V., and Weizmann, C.
- Bergmann, F., nitrogen-terminated conjugated systems and maleic anhydride, II, 36.
- and Bergmann, E., identification of 1:2:3:4:5:6:7:8-octahydrophenanthrene, II, 480.
- See also Bergmann, E., and Weizmann, C.
- Bergmann, G. von, peptic ulcer, III, 985.
- Bergmann, M., Fruton, J. S., and Pollok, H., specificity of trypsin, III, 518.
- and Stein, W. H., principle for the determination of amino-acids, and its application to collagen and gelatin, II, 236. Naphthalene-2-sulphonic acid as a reagent for amino-acids, II, 463.
- See also Behrens, O. K., Fruton, J. S., Hofmann, K., and Ing, H. R.
- Bergmann, W., Strong, L. C., and Smith, G. M., local increase of pigmentation in the skin of C.B.A. mice by the application of benzene, III, 416.
- Bergmann, Werner, relations between cholesterol and carcinogenic substances, III, 846.
- and Hirschmann, F., unsaturated steroids. VI. Structure of 3-chloro- and 3-phenyl-cholestadiene, II, 207.
- Hirschmann, F., and Skau, E. L., unsaturated steroids. V. Rearrangements and structure of steroid peroxides, II, 217.
- See also Skau, E. L.
- Bergren, W. See Stewart, W. S.
- Bergren, W. R., and Wiersma, C. A. G., chemical changes in the adductor muscle of the cheliped of the crayfish in relation to the double motor innervation, III, 126.

- Bergsteinsson, I. See McKittrick, D. S.
- Bergstermann, H., and Krauskopf, B., potentiation by cyanide of the convulsant action of brucine and hydrastinine, III, 511.
- Nocker, P. A., and Krauskopf, B., precipitation reaction between the pyridine derivatives picoline, β -picoline, and collidine and phenol derivatives, II, 528.
- See also Labes, R.
- Bergstrand, C. G., "ring-bands" in striated muscle, III, 242.
- Bergstrom, S., and Haslewood, G. A. D., substituted ketocholanic acids, II, 270.
- See also Jorpes, E.
- Bergstrom, F. W., direct introduction of the amino-group into the aromatic and heterocyclic nucleus. IV. Action of the alkali and alkaline-earth amides on substituted quinolines. V. Action of metallic amides on phenyl- and benzo-quinolines, II, 85, 126.
- and Robinson, (Sir) R., absorption spectra of benzoylformylloxindolephenylhydrazones and its derivatives, I, 178.
- Berisso, B., microchemical detection of metals of the first group *in situ* without previous separation, I, 277.
- See also Martini, A.
- Beritashvili, I., central nervous activity, III, 1035.
- Beritov, L. S., phenomena of general inhibition and release in central nervous system, III, 571.
- Berk, L., and Shapiro, H. A., histological changes in accessory sex organs of female *Xenopus* induced by endocrine preparations, III, 1054.
- Berkenheim, A. M., and Dankova, T. F., synthesis of piperylene from furfuraldehyde. I, II, 529.
- and Filimonov, M. P., application of the electronic theory to organic chemistry. IX. Mechanism of the reaction of formation of naphthalene from 1-nitronaphthalene, II, 54.
- Berkowitz, P., effects of oestrogenic substances in *Lebistes reticulatus* (guppy), III, 263.
- Berl, E., Justus Liebig, May 14th, 1803—April 18th, 1873, I, 225. Georg Lunge, 1839—1923, I, 627.
- and Koerber, W., cellulose compounds, II, 100.
- Berlin, R., decrease in haemolysins in serum in pernicious anaemia, III, 552.
- Berlin, T. See Bergmann, E., and Weizmann, C.
- Berlingozzi, S., and Lenoci, (Signa.) R., optically active amino-acids. VII., II, 52.
- Berman, H., torsion micro-balance for the determination of sp. gr. of minerals, I, 581.
- and Gonyer, F. A., re-examination of colusite, I, 542.
- and Harcourt, G. A., natural amalgams, I, 137.
- Berman, L. V. See Grünberg, G. J.
- Berman, M., Edwards, L. F., and Kitchin, P. C., effect of artificially induced hyperpyrexia on tooth structure in the rabbit, III, 1094.
- Berman, N., and Lowry, A., reactions of trialkyl phosphates, alkyl acetates, and *tert*-butyl hypochlorite in the Friedel-Crafts syntheses, II, 3.
- Bermond, A. See Rivoire, R.
- Bernal, J. D., vector maps and the cyclol hypothesis, I, 184. Protein molecule, III, 785.
- Fankuchen, and Riley, D. P., X-rays and the cyclol hypothesis, II, 461. Structure of crystals of tomato bushy stunt virus preparations, III, 336.
- Bernard, A. T., determination of red cell fragility, III, 449.
- Bernard, E., and Manneback, C., calculation of the frequencies and "gauches" fundamental modes of vibration of molecules of deuterethylene, $C_2H_2D_2$ ($x + y = 4$), I, 304.
- Bernard, J. See Decourt, J.
- Bernard, P. N., Guillermin, J., and Gallut, J., characteristics of the haemolysins of cholera vibrios, III, 529. Extraction of the haemolysin from the El Tor vibrio, III, 529. Haemolysis produced by El Tor vibrio and its haemolysin, III, 632.
- Bernard, R., nitrogen forbidden line 2P 4S in the auroral spectrum, I, 227. Origin of type B coloration in the aurora borealis, I, 229. Identification and origin of atmospheric sodium, I, 289. Possible presence of cyanogen bands in spectra of red aurora of type B, I, 298. [Spectrum of] the polar aurora, I, 439.
- See also Arnulf, A., and Tremblay, J. L.
- Bernardini, G., disintegrations and production of neutrons by bombardment of Be and of B with α -particles from Po, I, 3.
- and Bocciarelli, D., neutron spectrum of Po + Be, I, 396.
- and Ferretti, B., very weak [cosmic] radiation, I, 547.
- Bernds, M. See Kinsman, G.
- Berner, E., and Leonardsen, R., optically active acid anhydrides. III. Optically active anhydrides of alkylated succinic and glutaric acids, II, 200.
- Bernhard, A. See Pickhardt, O. C.
- Bernhard, G. G., and Skoglund, C. R., alpha frequency of human brain potentials as a function of age, III, 1037.
- Bernhard, F., blood examination and cancer diagnosis, III, 598.
- Bernhard, K., fission of the amide linking in the animal body. II. Degradation of propylamine and of the amides of suberic and sebacic acid, III, 172. Fate of hydroaromatic compounds in the animal organism. II. *cyclo*Hexane and *omega*-*cyclo*hexyl-fatty and -amino-acids. III. Hexahydro-*p*-toluic, *o*-, *m*-, and *p*-hexahydrophthalic, and *o*-, *m*-, and -hexahydroaminobenzoic acid. V. Metabolism of hydrogenated naphthalene and naphthalene derivatives, III, 174, 409. Fate of decalin and tetra-hydroquinoline, tetrahydroisoquinoline, and decahydroquinoline in the animal organism, III, 617.
- and Müller, Leo, fate of hydroaromatic compounds in the animal organism. IV. *omega*-*cyclo*Pentenyl and *omega*-*cyclo*Pentyl fatty acids, III, 174.
- See also Flaschenträger, B.
- Bernhard-Kreis, E., significance of histamine in delayed death after burns [toxic effect of skin and muscle extracts], III, 362.
- Bernhardt, H., diabetes insipidus, III, 379.
- Bernhart, F. W., denaturation and molecular splitting of ovalbumin by ultra-violet radiant energy, III, 621. Changes in p_H of irradiated ovalbumin solutions, III, 1007.
- and Arnow, L. E., kinetics of destruction of tyrosine combined in the egg-albumin molecule by ultra-violet radiant energy, I, 425.
- Bernhauer, K., and Knobloch, H., breakdown of glucose by *Acetobacter suboxydans*, III, 328.
- Bernheim, A. I. See Gerber, I. E., and Penner, A.
- Bernheim, A. R., and Garlock, J. H., parathyroidectomy for Raynaud's disease and scleroderma, III, 579.
- Bernheim, F., action of aminopyrine and antipyrine on oxidation of phospholipin by various tissues, III, 931.
- and Bernheim, M. L. C., hydrolysis of homatropine and atropine by various tissues, III, 98. Action of vanadium on tissue oxidations, III, 295. Action of vanadium on the oxidation of phospholipins by tissues, III, 407. Effect of titanium on oxidation of thiol groups by various tissues, III, 499. Action of manganese and other metals on oxidation of substances by the liver, III, 609.
- Bernheim, M. L. C., and Michel, H. O., effect of pyrrole on oxidation of amines and non-natural isomerides of amino-acids, III, 78.
- and Morgan, J. E., photo-oxidation of pyrrole, II, 559.
- See also Kohn, H. I.
- Bernheim, M. L. C. See Bernheim, F.
- Berning, H., results of treatment with depot insulins, III, 910.
- Bernschtein, A., glucose metabolism in semen, III, 52. Nutrient media and equilibrated salt solutions as diluents for semen, III, 52.
- and Schernigin, N., decomposition of hexosephosphoric acid in semen, III, 52.
- and Slovotshtov, I., lactic acid content of semen, III, 52.
- Bernschstein, A. V. See Katznelson, I. L.
- Bernstein, A. O., and Gregersen, M. I., diffusion of glucose and sucrose from the cerebrospinal fluid, III, 253.
- See also Himwich, H. E.
- Bernstein, H. See Whitmore, F. C.
- Bernstein, H. I., and Whitmore, F. C., common basis of intramolecular rearrangements. V. Inversion of configuration in semipinacolic deamination; configurational relationship between (+)-alanine and (+)- α -phenylpropionic acid, II, 369.
- Bernstein, H. J., calculation of the frequencies of the symmetrical modes of vibration for molecules with various types of symmetry, I, 11.
- and Martin, W. Howard, depolarisation measurements [of Raman lines] and structure of complex ions, I, 179.
- Bernstein, J. C., dermatitis due to a sulphur-meat complex, III, 1090.
- Bernstein, M., Moore, M. T., and Fishback, D. B., diabetes insipidus from metastatic involvement of the supraoptico-hypophyseal system, III, 49.
- and Simpkins, S., magnesium sulphate in measurement of circulation time, III, 560.
- Bernstein, M. J. See Cherry, T. H.

- Bernstein, S., and Wallis, E. S., sitosterol complex; isolation of α_3 -sitosterol, I, 421. Sitosterol complex; structure of α_1 -sitosterol, II, 503.
- Bernstein, S. S., Williams, H. H., Hummel, F. C., Shepherd, M. L., and Erickson, B. N., metabolic observations on a child with essential hyperlipæmia, III, 854.
See also Beach, E. F.
- Bernstein, T. B. See Feinberg, S. M.
- Bernth, O. See Dam, H.
- Bernthal, T. See Winder, C. V.
- Bernton, H. S. See Spies, J. R.
- Berrier, H., substances which act as plant auxins occurring in the blood and in autolysed organs of *Discoglossus* and the guinea-pig, III, 882.
- Berris, T. M. See Darling, M. A.
- Berry, A. J., thallous carbonate as a standard in volumetric analysis, I, 156. Titration of iodide in presence of chloride with silver nitrate, using rose-Bengal as adsorption indicator, I, 214. Standardisation of hydrochloric acid, I, 275. Determination of bromide in presence of chloride, I, 276.
- Berry, C. See Harrison, F.
- Berry, G. P. See Morrow, G.
- Berry, J. K. See Brentano, J. C. M.
- Berry, J. L. See Alcock, P.
- Berry, P. A., Macbeth, A. K., and Swanson, T. B., phellandrene nitrosites. I. α - and β -Nitrosites of *l*- α -phellandrene. II. α - and β -Nitrosites of *d*- α -phellandrene, II, 220, 514.
- Bersch, H. W., synthesis of homoisovanillic acid, II, 424.
- Bersin, T. See Feulgen, R., and Lauber, H. J.
- Bersot, H. See Demole, V., and De Morsier, G.
- Bertagni, P., chemical determination of vitamin-B, in animal and plant products, III, 765.
- Berthelemy, A. See Worms, G.
- Berthelot, A., Amoureux, G., and Deberque, S., detection of 3-indolylacetic acid in the presence of tryptophan, III, 1020.
and Dieryck, J., toxicity of 3-indolylacetic acid and other organic acids with analogous action, III, 935.
- Berthelot, See Rose, M.
- Berthet, M., analysis of chromite, I, 387.
- Berthier, G., and Gley, P., action of carbon dioxide on coronary circulation, III, 745.
- Berthier, (Mlle.) P., magnetic susceptibility and electrical sign of solutions of hæmatin and acetylhamin, I, 69. Variations in the specific coefficient of magnetisation of oxyhæmoglobin in presence of sodium hydroxide and hydrochloric acid, I, 362. Specific coefficient of magnetisation of oxyhæmoglobin, III, 622.
See also Boutaric, A.
- Bertho, A., Kurchi alkaloids. II. Extraction of concassine and accompanying bases, II, 459.
- Berthois, L., deposit of sediment in the western Mediterranean, I, 107. Dioritic massif from Brée-Neau, Mayenne, I, 287. Origin of tourmaline in sedimentary rocks, I, 288.
See also Tiollais, R.
- Bertino, S., and Pittorru, Q., pharmacology of guaiaicol, III, 779.
- Bertleff, V., surface-active substances in contact catalysis, I, 424.
- Bertolotti, M., functional factors in X-ray therapy, III, 868.
- Berton, A., ultra-violet absorption of solid polymorphic substances, I, 448.
- Bertram, F., and Never, H. E., insulin fat dystrophy, III, 262.
- Bertram, G. L., pituitary gland and fat metabolism, III, 46. Action of growth hormone in hypophysectomised rats, III, 136.
- Bertrand, D., diffusion of molybdenum in plants, III, 949.
- Bertrand, G., quantity of zinc contained in sea-water, I, 162.
and Brooks, G., methoxyl content of lignified tissues, III, 217.
and Silberstein, L., effect of age on boron content of leaves, III, 1019. Boron content of the leaves of beetroot suffering from heart-rot, and of other plants, III, 1111.
See also Cornil, L.
- Bertrand, I., and Barrabe, L., hydrocarbon deposit in the Petites Pyrenées, to the north of Saint-Goudens, I, 541.
- Delay, J., and Guillaing, J., the electroencephalogram in myxœdema, III, 34.
and Lecoq, R., peripheral nervous lesions due to polyneuritis caused, in the pigeon, by adding lactic acid to diets rich in carbohydrates, proteins, or fats and containing large amounts of the vitamin-B group, III, 601. Changes in peripheral nerves produced by diets high in urea or uric acid, III, 992.
- Bertschinger, R., graphical representation of the lever law of heterogeneous equilibrium, I, 80.
- Besly, D. M. See Baker, W.
- Besnard, P. See Besredka, A.
- Besredka, A., Berczeller, A., and Besnard, P., anaphylaxis and parabiosis, III, 1006. Parabiosis and antianaphylaxis, III, 1091.
and Gross, L., nature of specific immunity to Rous sarcoma, III, 279. Experimental epithelioma of the stomach; intracutaneous immunisation, III, 698.
- Laval, P., and Besnard, P., transmission of anaphylactic sensitivity by serum, III, 961.
and Salamon, E., spinach juice medium, III, 633.
See also Nectoux, R.
- Bessalov, P., and Kobosev, N. I., production of oxidic catalysts by separation of aerosols. I. Catalytic activity of separated aerosols of copper oxide, I, 34.
- Bessemans, A., tissue temperatures in the normal rabbit, III, 277. Role of tissue temperature in localising syphilitic lesions, III, 527.
and Canneyt, J. van, ocular tissue temperatures in normal rabbits and after syphilitic and spirochætal infection, III, 673.
- Meirhaeghe, A. van, Thielen, E. van, De Wilde, H., Witterbolle, P., and De Boregrave, O., chemotherapy and chemoprophylaxis in arsenical-resistant trypanosomiasis and in experimental syphilis, III, 509.
- Besserer, H., heat-retaining capacity of clothing materials containing artificial wool and its evaluation by means of the Pfeiderer Büttner Frigorigraph, III, 620.
- Bessey, O. A., vitamin-C, III, 288. Determination of small quantities of ascorbic and dehydroascorbic acid in turbid and coloured solutions in presence of other reducing substances, III, 291.
and Wolbach, S. B., vitamin-A, III, 73. Vascularisation of rat cornea in riboflavin deficiency; corneal vascularisation in vitamin-A deficiency, III, 495.
See also Hastings, A. B., and Pinkerton, H.
- Best, C. H., heparin and thrombosis, III, 10, 550.
and Ridout, J. H., undernutrition and liver-fat, III, 65.
See also Murray, G. D. W., Solandt, D. Y., and Young, F. G.
- Best, R. J., preserving effect of reducing systems on the virus of tomato spotted wilt, III, 729.
- Besta, B., Morellini, M., and Cattaneo, C., carbohydrates and antigenic properties, III, 120.
- Beszler, G., structure of the callus, III, 805.
- Bethe, H. A., energy production in stars, I, 237. Meson theory of nuclear forces, I, 447.
and Critchfield, C. L., formation of deuterons by proton combination, I, 55.
- Hoyle, F., and Peierls, R., interpretation of β -disintegration data, I, 231.
and Kirkwood, J. G., critical behaviour of solid solutions in the order-disorder transformation, I, 559.
See also Hoffman, J. G., and Rose, M. E.
- Bethel, F. H. See Isaacs, R., and Sturgis, C. C.
- Bethke, R. M., Record, P. R., and Wilder, O. H. M., vitamin-E, in chick nutrition, III, 75.
See also Record, P. R.
- Betlach, C. J., effects of pentothal sodium on the electrocardiogram of patients with essential hypertension, III, 87.
- Betti, M., special case of isomerism, II, 289.
and Lucchi, E., transformation of *d*- into *meso*-tartaric acid by pancreas, III, 721.
- Bettini, D., Adie's disease and avitaminosis, III, 970.
- Bettley, F. R., and Simon, P., bullous eruption from sulphanilamide, III, 859.
- Bettman, J. See Horner, W. D.
- Betz, H. See Günther-Schulze, A.
- Beukers, M. C. F., crystal growth of sodium chloride on galena, I, 304.
- Beumer, A. See Schaaf, H.
- Beumer, H., and Hükel, R., nephropathic action of cystine and cysteine, III, 915.
- Beumer, J., effect of sucrose on behaviour of staphylococcus hæmolyticus to heat, III, 526. Effect of p_H on thermoresistance or thermolability of staphylococcus hæmolyticus, III, 526.
- Beutler, H., interpretation of molecular spectra and study of molecular spectra in celestial objects. V. Influence of pressure and temperature on absorption and fluorescence of special lines, I, 354.
- Bevan, A. D. See Thompson, W. O.
- Bever, A. K. van, crystal structure of ferricyanides with bivalent cations, I, 12. Determination of vitamin-A in milk and butter, III, 494.

- Beveridge, A. J., blood picture in Singapore. III, 810.
- Bevin, S. See Hoskins, R. G.
- Bexon, D. See Bennet-Clark, T. A.
- Beynaert, M. See Govaert, F.
- Beyer, H. G. See Whitaker, M. D.
- Beyer, K. See Walther, R.
- Beyer, K. H., effect of benzedrine (β -phenylisopropylamino) sulphate on metabolism and the cardiovascular system in man, III, 861.
- and Meek, W. J., effect of benzedrine sulphate on stomach and intestine, III, 688.
- Beyne, J., and Gougerot, L., electrical transmission and distant recording of arterial pressure and respiratory changes, III, 1020.
- Beynum, J. van, and Pette, J. W., decomposition of citric acid by *Betacoccus cremoris*, III, 942.
- Beyts, N. M., and Plant, S. G. P., action of nitric acid on polycyclic indole derivatives. XIII. Indeno-(2'3':2:3)-indole, II, 561.
- Bezssonoff, N., and Woloszyn, M., relationship between potential of platinum and vitamin-C content of solutions exposed to air, III, 538. Irreversible effect of avitaminosis-C of short duration, III, 852.
- Bezngli, D. V., and Rudakov, M. M., selective absorption of hydrogen sulphide, I, 607.
- Bhabha, H. J., fundamental length introduced by the theory of the mesotron (meson), I, 237. Classical theory of mesons, I, 547.
- Bhaduri, P. N. See Semmens, C. S.
- Bhagavantam, S., interpretation of Raman spectra in crystals: anhydrite and gypsum, I, 120.
- and Rao, C. V. J., ultrasonic velocity and the adiabatic compressibility of liquids, I, 360.
- and Venkatarayudu, T., Raman effect in relation to crystal structure, I, 300.
- Bhagvat, K., Blaschko, H., and Richter, D., amine-oxidase, III, 939.
- See also Hill, Robert.
- Bhagwat, N. A., and Wheeler, T. S., chalkones: reactivity of aryl *o*-alkoxy-styryl ketone dibromides and synthesis of flavones therefrom, II, 123.
- Bhagwat, W. V., dissociation constants of organic acids from solubility measurements, I, 472.
- Bhar, J. N., stratification of the ionosphere, I, 162.
- Bhatnagar, M. S. See Bhatnagar, S. S.
- Bhatnagar, S. S., magnetic evidence regarding the state of manganese in glasses, I, 353.
- Cameron, A., Harbard, E. H., Kapur, P. L., King, Alexander, and Prakash, B., magnetic susceptibilities of metallic oxides, with special reference to those of chromium and manganese, I, 601.
- Kapur, A. N., and Bhatnagar, M. S., adsorptive properties of synthetic resins. II. Adsorption of potassium salts of various anions. III, I, 467, 608.
- and Kapur, P. L., magneto-chemical investigations at the chemical laboratories of the University of Lahore, I, 361.
- Kapur, P. L., and Hashmi, M. S., phototropy and photochemical isomerism from the magnetic standpoint, I, 183.
- Bhatnagar, S. S., Kapur, P. L., and Hussain, A., properties of bivalent metal oleates. I, II, 200.
- Kapur, P. L., and Mittal, G., magnetic properties of copper amalgams, I, 138. Magnetic properties of copper amalgams, I, 559.
- Kapur, P. L., and Prakash, B., magnetic study of the oxides of chromium and manganese, I, 460.
- Nevgi, M. B., and Ohri, G. L., diamagnetic susceptibilities of mercury in various states of combination, I, 246.
- Prakash, B., and Singh, J., colour and magnetic properties of manganous sulphide, I, 601.
- Bhattacharya, D. P. See Ghosh, B. N.
- Bhattacharya, J. See Banerjee, K.
- Biale, J. B., and Halma, F. F., use of heteroauxin in rooting sub-tropical plants, III, 802.
- and Weiss, F. T., identification of acetaldehyde in the steam distillate of the peel of citrus fruits, III, 638.
- Bianco, A., and Jolliffe, N., anaemia of alcohol addicts, III, 228.
- Biasotti, A. See Houssay, B. A.
- Bibb, J. See Diggs, L. W.
- Bibbins, F. E. See Stuart, E. H.
- Bibikova, A. F., relation between the structure of tissues and cold-resistance, III, 338.
- Biborski, J., histology of the veins of *Gadus callarias*, L., III, 124.
- Bibus, B., action of uleron in male gonorrhoea, III, 306.
- Bichel, J., culture of leukæmic cells *in vitro*, III, 4.
- Bickel, A., action of cacao and theobromine on metabolism, III, 409.
- and Haug, A., effect of amino-acids on liver-glycogen during a protein-free diet, III, 271.
- Bickel, A. F. See Wibaut, J. P.
- Bickel, G., administration of insulin in diabetics with angina pectoris, III, 909.
- Bickenbach, O., correlation of circulation and respiration as basis of individual working capacity, III, 716.
- Bickenbach, W., treatment of repeated miscarriage, III, 685.
- Bickford, R. G., itch sensation; its peripheral mechanism, and central pathways, III, 245.
- Bidder, H. von, and Rupe, H., 2-amino-methyltetrahydroquinoline and its derivatives, II, 561.
- Biddle, E., and Langley, G. F., transfusion with conserved blood, III, 551.
- Biddulph, O., movement of radiophosphorus in bean seedlings, III, 799.
- Bideau, J. See Le Chuiton, F.
- Biehl, R., resistance to drying and osmotic sensitivity of algæ from different sea depths, III, 435.
- Biedebach, F., lupeol. IV, II, 330.
- Biedermann, H., chronic carbon monoxide poisoning and pernicious anaemia, III, 647.
- Biedermann, M. M., metal models and chemical linkage, I, 242. Theory of polarisability. I, I, 507.
- and De Groot, S. R., electronic energy of the ground state of methane, I, 358.
- Biefeld, L. P., and Howe, D. E., separation and determination of copper and nickel by salicylaldehyde; effect of pH, I, 430.
- Bieling, K. H., efficiency tests in adolescents, III, 94.
- Bieling, R., and Oelrichs, L., penetration of bacterial toxins into the brain, III, 430.
- Bielinski, Z., and Wierzechowski, M., effect of oxygen and carbon dioxide on sensitivity of carotid sinus, III, 968.
- See also Wierzechowski, M.
- Biernond, A., new form of experimental position-nystagmus in the rabbit and its clinical value, III, 571.
- Bier, O., and Planet, N., capillary permeability in Schwartzman's phenomenon, II, 124. Presence of a factor augmenting capillary permeability in extracts of normal skin, III, 124.
- and Rocha e Silva, M., mechanism of increase of capillary permeability in inflammation and probable identity of the leucotaxin with histamine, III, 355. New proof of identity of Menkin's leucotaxin with histamine, III, 355.
- See also Rocha e Silva, M.
- Biereigel, R. O., cell content and nuclear size of liver cells during pregnancy in the white mouse, III, 149.
- Bierich, R., influence of genetic factors on the formation and development of the carcinoma "anlage," III, 168.
- Bierman, W. See Friedlander, M.
- Bierry, H., Gouzon, B., and Magnan, C., *N*-acetylglucosamine and protein sugar, III, 553. Blood-proteins and determination of protein-sugar, III, 894. Determination of protein-sugar and its constituents [in plasma], III, 894. Combined sugar in *Helix pomatia* and *Maia squinado*, III, 1029.
- Biester, H. E., and Eveleth, D. F., nutritional studies in swine [spinal cord changes and diet], III, 992.
- See also Eveleth, D. F.
- Bieter, R. N., Larson, W. P., Lavine, M., and Cranston, E. M., protective action of sulphapyridine against type II pneumococcus infections in mice, III, 1081.
- See also Cunningham, R. W., and Larson, W. P.
- Bigelow, H. E., and Steeves, W. H., nitration of 3:3'-dichloroazoxybenzene and reduction of products, II, 415.
- Biggart, J. H., and Alexander, G. L., experimental diabetes insipidus, III, 487.
- See also Campbell, A. C. P.
- Biggs, A. D. See De Takats, G.
- Bigler, A., blood-cell response to sulph-anilamide therapy, III, 177. Loss of subcutaneous fat of the lower extremities (lipodystrophy), III, 607.
- and Haralambie, J. Q., sulphanilamide and related compounds, III, 1080.
- and Werner, M., cyanosis from use of sulphanilamide, III, 1084.
- See also Peacock, S.
- Biglietti, F., chemical and physicochemical analysis of mineral water of Villa Gandolfi (Turin), I, 584.
- Bignardi, C., histochemical study of lipins in the pancreas of reptiles, III, 484.
- Bignotti. See Halphen.
- Bigwood, E. J., and Errera, M., behaviour of inorganic ions during ultrafiltration of protein solutions containing sodium chloride, I, 417.
- Bijl, A. See Michels, A.

- Bijvoet, J. M., and MacGillavry, C. H., is it possible to derive a structure model of a crystal exclusively from the diffraction phenomena of X-rays? I, 358.
See also MacGillavry, C. H., and Verweel, H. J.
- Bikerman, J. J., lowering of surface tension of water by electrolytes, I, 23. Formation and structure of multilayers, I, 255.
and Rideal, E. K., nature of sliding friction, I, 415.
- Bikov, C. M., functional connexion of cerebral cortex with viscera, III, 572.
- Bilek, P., gravimetric determination of tellurium in basic media, I, 96.
- Bilenko, R. L. See Schorigin, P. P.
- Biletzki, S. F., Ovetschkin, E. K., and Franzevitch, I. M., influence of surface-active substances and colloids on the overpotential of cadmium and lead, I, 421.
- Bilewicz, S., influence of famine on growth of tadpoles, III, 282.
- Biller, S. B. See Perla, D.
- Billeter, J. R. See Miescher, K.
- Billimoria, M. C. See Pearsall, W. H.
- Billings, M. P. See Williams, Charles R.
- Billingsley, L. W., O'Donovan, D. K., and Collip, J. B., specific metabolic principle of the pituitary, III, 258.
- Billman, J. H., and Dougherty, G., reaction of sulphur with halogenated derivatives of diphenyl sulphide, II, 155.
and O'Mahony, E., use of nitrobenzenesulphenyl chloride in identification of amines, II, 500.
and Smith, C. M., reaction of carbon suboxide with magnesium methyl iodide, II, 146.
- Billmann, F., and Engel, R., compensatory action of foetal adrenals during pregnancy in adrenalectomised dog, III, 682.
- Bills, C. E., chemistry of vitamin-D, III, 77.
Massengale, O. N., Hickman, K. C. D., and Gray, E. Le B., new vitamin-D in cod-liver oil, III, 77.
- Biltz, H., uric acid and cyanuric acid; the carbamyl group, II, 286.
- Biltz, W., Fourier analysis of magnesium and space chemistry of the metals, I, 56.
and Ehrhorn, H. [with Meisel, K.], affinity. LXXXV. Systems osmium-phosphorus and ruthenium-phosphorus, I, 146.
and Heimbrecht, M., affinity. LXXXIX. Cobalt phosphides, I, 428.
and Hülsman, O., parachor and zero-point volume, I, 358.
and Kocher, A., affinity. LXXXVIII. System vanadium-sulphur, I, 427.
and Weibke, F., molecular refraction of glasses, I, 250, 412.
Wrigge, F. W., and Meisel, K., rhenium-blue, I, 383.
- Binder, A., action of follicle hormone on movements of the Fallopian tubes, III, 979.
See also Winkler, H.
- Binder, C. See Florentin, P.
- Binder, L., effect of *Nerium oleander* in decompensated heart diseases, III, 505.
- Binder, M. N. See Huston, R. C.
- Binder, O., hydrates of cupric oxide, I, 482.
- Bindewald, H., relations between *histolytic* toxin and antitoxin, III, 1101.
- Binet, L., Bochet, M., and Bour, H., alveolar oxygen and oxygenation in pulmonary disease, III, 241.
- Bochet, M., and Guiraud, A., fall in red cell count caused by inhalation of oxygen, III, 968.
- and Burstein, M., broncho-constriction produced by choline derivatives, III, 181.
- Cauchois, J., and Livieratos, S. S., sex hormones and tissue-glutathione; folliculin and glutathione in the uterus, III, 266.
- Marek, and Burstein, M., broncho-constriction caused by extract of *Amanita muscaria*, III, 181.
- and Perel, L., antitoxic power of glutathione, III, 105. Prevention of experimental lead poisoning [by sodium thiosulphate], III, 1088.
- and Robillard, E., detoxication by thiol compounds, III, 338.
- and Strumza, M., ephedrine as agents in combating anoxæmia, III, 84. Effect of alterations in blood cell count on resistance to acute anoxæmia, III, 968.
- Weller, G., and Robillard, E., effect of glutathione and thiol compounds on cobra venom *in vitro*, III, 1089.
- Bing, J., serum-protein determination by the glass-bead method, III, 119. Value of Landis' capillary permeability test in the clinic, III, 363.
- and Broager, B., effects of nicotinic acid on two patients with idiopathic steatorrhea (sprue), III, 603.
See also Petri, S.
- Binger, M. W. See Engle, D. E.
- Bingham, D. L. C. See Collier, F. A.
- Bingham, E. C., and Stookey, S. D., relation between fluidity, temperature, and chemical constitution of pure liquids, I, 462.
- Bini, L., epileptic attacks induced by electric current, III, 831.
- Binkley, S. B., Cheney, L. C., Holcomb, W. F., McKee, R. W., Thayer, S. A., MacCorquodale, D. W., and Doisy, E. A., constitution and synthesis of vitamin-K₁, II, 513.
- MacCorquodale, D. W., Cheney, L. C., Thayer, S. A., McKee, R. W., and Doisy, E. A., derivatives of vitamin-K₁ and -K₂, III, 853.
- MacCorquodale, D. W., Thayer, S. A., and Doisy, E. A., isolation of vitamin-K₁, III, 1075.
See also MacCorquodale, D. W., McKee, R. W., and Thayer, S. A.
- Binkley, W. W., and Degering, E. F., esters of chlorosulphonic acid, II, 4.
- Binks, W. See Kaye, G. W. C.
- Binning, G., goitre in Saskatoon, 1938, III, 1048.
- Binns, F., and Clancy, J. J., chronic meningococæmia promptly cured by sulphanilamide, III, 1081.
- Binopulos, X. See Andreadis, T.
- Binzer, I. See Müller, Adolf.
- Biozzi, S., relationship between lowering of surface tension and action of disinfectants, III, 1000.
- Biquard, (Mlle.) D., Raman spectra of *cis*- and *trans*- α - and - β -decalones, I, 122. [Raman] spectra of β -tetralone and β -indanone, I, 301. Raman spectra of oximes, I, 451.
- Birch, A. J., structure of origanene. I, II, 170. Oximino- α -thujene, II, 516. Exudation of *Araucaria Bidwilli*, III, 439.
and Earl, J. C., structure of origanene. II. Its identity with α -thujene, II, 272, 515.
and Lions, F., constitution of gmelinol. I, II, 170.
- Birch, F., thermo-electric measurement of high temperatures in pressure apparatus, I, 341.
and Bancroft, D., elasticity of rocks and massive minerals, I, 110.
- Birch, S. F., and Dunstan, A. E., olefine-isoparaffin additive reactions, II, 465.
- Birch, T. W., requirements of the dog and the rat for nicotinic acid. I. Minimum amount required by the dog. II. Is nicotinic acid an essential substance for the rat? III, 1071.
- Birch-Hirschfeld, A. See Franke, H.
- Bird, H. R., Oleson, J. J., Elvehjem, C. A., and Hart, E. B., effectiveness of chondroitin in preventing gizzard erosion in chicks, III, 292. Additional nutritional factors required by the rat, III, 293.
- Bird, L. H., and Daly, E. F., viscosity in binary liquid systems, I, 312.
- Bird, M. L., and Challenger, F., formation of organo-metalloidal and similar compounds by micro-organisms. VII. Dimethyl telluride, II, 192.
- Bird, O. D. See Thayer, S. A.
- Birge, R. T., present status of the value of e/m , I, 56.
- Birkeland, J. M., and Steinhaus, E. A., selective bacteriostatic action of sodium lauryl sulphate and of "dreff," III, 859.
- Birkelo, C. C., and Brosius, W. L., X-ray study of pulmonary arterial circulation in autopsy material, III, 19.
- Birkhauser, H. See Berenstein, S., and Sullmann, H.
- Birkhang, K., sulphonamide in experimental tuberculosis, III, 1082.
- Birkmayer, W., diminution of muscular function in myasthenia gravis, III, 27. Induced increase in muscle tone in a case of flaccid hemiplegia, III, 29. New dynamometer, II, 662.
- Birkofer, L. See Kuhn, R.
- Birnbaum, L. S., and Powell, G., reduction of α -ketol esters, II, 373.
- Birnberg, C. H. See Kurzrok, L.
- Birnberg, T. L., and Steinberg, C. L., oil of chenopodium poisoning, III, 865.
- Biró, Emert, endocrine connexions with retinitis pigmentosa, III, 752.
- Biró, Imre, therapeutic experiments in cases of retinitis pigmentosa, III, 752.
- Birse, E. A. See Melville, H. W.
- Birstein, G., and Loebnow, M., molecular state of arsenious oxide in the adsorption layer, as indicated by the adsorption isotherm, I, 254.
- Bisbee, R. F. See Schettler, O. H.
- Bischoff, F., and Long, M. L., influence of low-temperature environment on the growth of mouse sarcoma 180, III, 489. Relation of vitamin-B complex to tumour growth, III, 1064.
- Bischoff, H., and Brieger, H., action of vitamin-D₂ and -D₃ in rickets, III, 291.
- Bischoff, H. W., and Lyons, W. R., immunology of hypophyseal mammo-tropic preparations, III, 906.
- Biscoe, J., Piekels, E. G., and Wyckoff, R. W. G., air-driven ultracentrifuge for molecular sedimentation, I, 224.

- Bisgard, J. D., hyperthyroidism and hypertension, III, 579. Sensitisation and desensitisation of rabbits to heteroplastic transplants of thyroid tissue, III, 975.
- McIntyre, A. R., and Osheroff, W., sodium, potassium, and chlorides of serum in experimental traumatic shock, induced hyperpyrexia, high intestinal obstruction, and duodenal fistula, III, 651.
- Bishop, C. L. See Windle, W. F.
- Bishop, F. W., inexpensive portable electric thermometer for the hyperpyrexia clinic, III, 221.
- See also Pommerenke, W. T.
- Bishop, J. See Riebsomer, J. L.
- Bishop, P. M. F., Boycott, M., and Zuckerman, S., oestrogenic properties of diethylstilboestrol, III, 264.
- Biskupski, F., durable electrode of amalgamated platinum net, I, 340. Action of alcohol on permeability of the frog's skin, III, 511.
- Bisset, K. A., growth of bacterial colonies, III, 522.
- Bistriceanu, I. See Paulian, D.
- Biswas, M. M., adsorption of hydrogen ions by serum-globulin and its antibody, III, 232.
- Bito, S., wild silks. IV. Viscosity concentration constant of fibroin sols, I, 522.
- Bittel, H., and Gerlach, W., ferromagnetism and electrical properties. IX. Curie point and electrical resistance, I, 66.
- Bittenbender, W. A., and Degering, E. F., effect of *para*-substitution on bacteriostatic properties of phenylacetic acid, III, 522.
- Bitterlin, O. See Erlenmeyer, H.
- Bittner, J. J., differences in an inbred albino strain of mice following a change in diet. I. Litter strain. II. Mortality, III, 282. Relation of nursing to the extra-chromosomal theory of breast cancer in mice, III, 489. Susceptibility of mice to spontaneous lung carcinomas, III, 490. Breast and lung carcinoma in "A" stock mice, III, 698. Breast cancer in mice, III, 763. Breast cancer in breeding and virgin "A" and "B" stock female mice and their hybrids, III, 989. Influences of breast-cancer development in mice, III, 1063. Breast-cancer and pedigree relationship of fostered "A" stock mice, III, 1063.
- Biujanovskaja, I. See Jermoljeva, Z. V.
- Bizard, G., Warembourg, H., and Laine, E., effect of acetylcholine on intrapleural pressure, III, 308. Effect of histamine on pleural pressure in dog, III, 899.
- See also Lespagnol, A.
- Bizette, H., and Tsai, B., magnetic susceptibility of manganous fluoride, MnF_2 , at low temperatures, I, 514.
- Bjälve, G., Nilsson, R., and Burström, D., vitamin- B_1 as a growth factor for *B. radicola*, III, 328.
- See also Nilsson, R.
- Bjerge, T., Broström, K. J., and Koch, J., decay curves of uranium and thorium fission products, I, 444.
- Bjering, T. See Kjems, H.
- Bjerlov, H. See Marcus, H.
- Bjørneboe, M., specific protein in rabbit pneumococcal serum, III, 794.
- Bjornstahl, Y., structure of blue gold sols, I, 196. Measuring and automatically regulating the speed of the ultracentrifuge, I, 583.
- and Snellman, O., simple Couette viscosimeter with thermostat device; experiments on the influence of an electric field on viscosity of anisotropic liquids, I, 225.
- Bjurstedt, H., and Euler, U. S. von, effect of tetanus and adrenaline on single muscle twitches after adrenalectomy, III, 566.
- Blacet, F. E., and Valle, J. E. L., photolysis of the aliphatic aldehydes. VII. Crotonaldehyde at elevated temperatures, I, 209.
- and Volman, D. H., photochemical oxidation of crotonaldehyde, I, 272.
- Blacher, L., actions of various drugs and solutions on the coagulability of the blood, III, 231. Blood coagulability and its value in internal diseases, III, 231. Value of examination of coagulability of blood by the coagulo-retractoviscometer, in internal diseases, III, 450. Value of coagulo-retractoviscometer in pregnancy and gynaecological conditions, III, 815.
- Blachnitzky, H. See Langenbeck, W.
- Black, A., effect of protein and exercise at different ages on basal metabolism, III, 1076.
- and Murlin, J. R., effect of protein and exercise at different ages on total energy metabolism, III, 1075.
- Black, A. P., and Bartow, E., hydrogen-ion activity and buffer capacity of natural and treated waters, I, 428.
- Black, D. A. K., urea clearance in haematemesis, III, 391.
- Black, E. C., and Irving, L., effect of haemolysis on affinity of fish blood for oxygen, III, 24.
- See also Root, R. W.
- Black, H. C. See Young, H. H., jun.
- Black, J. H., oral administration of ragweed pollen, III, 618.
- Black, J. R. See Woolsey, F. M.
- Black, L. A. See Croft, C. C.
- Black R. See Webster, J. E.
- Black, S. A. See Beams, J. W.
- Black, W. C., diagnosis of congenital syphilis, III, 876.
- See also Gersh, I.
- Blackberg, S. N. See Hrubetz, M. C.
- Blackburn, J. M. See Tooth, G.
- Blackburn, S., and Challenger, F., formation of organometalloidal and similar compounds by micro-organisms. VI. Further studies on the fission of the disulphide linkage, II, 12.
- Blackett, P. M. S., further evidence for radioactive decay of mesotrons, I, 55. Instability of the barytron and the temperature effect of cosmic rays, I, 55. Instability of the mesotron and the gravitational constant, I, 447.
- Blackfan, K. D., and May, C. D., inspissation of secretion, dilation of the ducts and acini, atrophy and fibrosis of the pancreas in infants, III, 64.
- Blackfield, H. M., and Goldman, L., [treatment of] burns in children, III, 867.
- Blackie, J. J., and Ritchie, D., valerian: a new alkaloid, II, 233.
- Blackie, W. J., and Cowgill, G. R., occurrence of carotene in oil of *Atalea gomphococca*, Mart., and its relation to vitamin-A potency, III, 702.
- Blackman, G. E., and Templeman, W. G., interaction of light intensity and nitrogen supply in growth and metabolism of grasses and clover (*Trifolium repens*). II. Influence of light intensity and nitrogen supply on leaf production by frequently defoliated plants, III, 108.
- Blackman, M., fine structure of residual rays, I, 300.
- See also Thomson, G. P.
- Blacktin, S. C., direct-view particle counter and portable ultramicroscope, I, 43.
- Blade, E., calibration of weights, I, 581.
- Blaich, W., fate and excretion of uleron, III, 306.
- Blair, C. M., and Purse, J. H., improved gas analysis apparatus employing a simplified automatic absorption pipette, I, 281.
- Blair, D., neurological manifestations seen during cardiazol and insulin treatments [of psychoses], III, 249.
- Bailey, K. C., and McGregor, J. S., treatment of epilepsy with epanutin, III, 1086.
- Blair, D. M., human trypanosomiasis in Southern Rhodesia, 1911—1938, III, 628.
- Blair, E. A. See Erlanger, J.
- Blair, H. A., effect of acetylcholine on excitability of frog's sartorius muscle, III, 243. Time constant of excitation and velocity in supernormal phase of nerve, III, 1035.
- and Wedd, A. M., pneumocardiographic measurements, III, 821.
- See also Carleton, B. H.
- Blair, J. M. See Thurston, M.
- Blair, R. See Roberts, L. J.
- Blaisdell, B. E. See Kaminsky, J.
- Blaisdell, D. J. See Davidson, R. W.
- Blaisse, B. S., Cooke, A. H., and Hull, R. A., attainment of low temperatures by pumping liquid helium II, I, 220.
- Blake, F. C., order versus disorder in ternary structures including spinels, I, 11.
- Blake, M. A., Nightingale, G. T., and Davidson, O. W., nutrition of apple trees, III, 532.
- Blalock, A., and Levy, S. E., gradual complete occlusion of coeliac axis, superior and inferior mesenteric arteries, with survival of animals: effects of ischaemia on blood pressure, III, 658.
- See also Cressman, R. D., and Levy, S. E.
- Blalock, J. F., jun. See Davis, H. A.
- Blalock, J. R. See Harris, M. M.
- Blanc, G. A. [with Mantovani, T.], geochemical interpretation of the quaternary formations of Grotta Romanelli (Terra d'Otranto). I. Data and methods of investigation. II. Colloidal complexes, I, 163.
- Blanc, P. See Brustier, V.
- Blanchard, E. W., and Tallman, R. C., oral assay of adrenal cortical hormone, III, 378.
- Blanchard, L., stability of reduced ascorbic acid in the pituitary and adrenal glands of the horse during cadaverisation, III, 604.
- Blanchard, M. H. See Cohn, E. J.
- Blanck, E., and Sachse, J., determination of total sulphur in plants, especially in sunflower, III, 341.
- and Themnitz, R., weathering of igneous rocks in the Chilean desert, I, 343.
- Blanck, H. C., thermochemistry of paraffins and aliphatic alcohols, I, 420.

- Blancpain, C. See Meunier, P.
- Bland, J. O. W., and Robinow, C. F., inclusion bodies of vaccinia and their relationship to the elementary bodies studied in cultures of rabbit's cornea, III, 529.
- Blandau, R. J., eliminating the electrification of paraffin ribbons, III, 1.
See also Boling, J. L.
- Blangey, L., nitrosation of primary aromatic amines, II, 56.
- Blank, H. See Pfeiffer, P.
- Blank, I. H., measurement of p_H of skin surface. I. Technique. II. p_H of exposed surfaces of adults with no apparent skin lesions, III, 762.
- Blank, O., influence of temperature on absorption spectra of solid solutions of samarium, I, 177.
- Blankenhorn, M. A. See Kooser, J. H.
- Blanksma, J. J., and Bakels, H. A., connexion between taste and constitution of carboxylic acid hydrazides and their derivatives, II, 303.
- Blaschko, H., amino oxidase and diamines; action of guanidine, III, 720. Specific action of *l*-dopa decarboxylase, III, 977.
- and Schlossmann, H., inactivation of adrenaline by catechol oxidase *in vitro*, III, 140.
See also Bhagvat, K.
- Blasdale, W. C., and Slansky, C. M., solubility curves of boric acid and sodium borates, I, 322.
- Blasius, W. See Neidhardt, K.
- Blat, E. J., Gerber, M. J., and Neuman, M. B., influence of organic peroxides on the cool flame of butane, I, 616.
- Blatherwick, N. R. See Larson, H. W.
- Blatt, A. H., tautomerism of oximes, II, 38, 187. Stereoisomerism *o*-hydroxybenzophenoximes, II, 115. Chemical constituents of *Cannabis sativa*, III, 215.
- Blatt, E., Fouts, P. J., and Page, I. H., failure of electromagnetically induced heat to increase renal efficiency, III, 274.
and Page, I. H., hypertension and renal artery constriction in man, III, 658.
- Blauch, M. B., Koch, F. C., and Hanke, M. E., xanthine-oxidase in rat blood, III, 1095.
- Blauth-Opienska, J. See Truszkowski, R.
- Blauvelt, L., use of non-cooked, non-sterilised coconut milk as an additional nutrient substance in culture media, III, 434.
- Blaydes, G. W., use of Bismarck-brown γ in some new stain schedules, III, 958.
- Blazsó, S., course of processes of oxidation in developing organism, III, 956.
See also Kramár, J.
- Bleakney, W. See Delfosse, J.
- Bleaney, B., and Simon, Franz, vapour pressure curve of liquid helium below the λ point, I, 557.
- Bleckwenn, W. J., and Masten, M. G., antidotal treatment of barbiturate intoxication, III, 315.
- Blegen, E., comparison of osmotic pressure in blood and cerebrospinal fluid, III, 374. Preparation of semipermeable tubes for determination of osmotic pressure, III, 440.
and Rehberg, P. B., determination of the osmotic pressure of biological fluids, III, 195.
- Bleisch, I. See Walinski, F.
- Bless, A. A., effect of X-rays on seeds, III, 194.
- Blevins, A. See MacNeal, W. J.
- Blewett, J. P., time changes in emission from oxide-coated cathodes, I, 291. Magnetic operation of chemical balances, I, 538.
- Liebhafsky, H. A., and Hennelly, E. F., vapour pressure and rate of evaporation of barium oxide, I, 462.
- Blicke, F. F., and Centolella, A. P., acid amides as hypnotics. I. Acylcarbamides. II. Acetamides, II, 62.
and Maxwell, C. E., naphthylaminoalkanes, II, 414.
and Monroe, E., antispasmodics. I, II, 106.
and Parke, H. C., alkylaminoalkyl esters of aminonaphthoic acids as local anaesthetics, II, 321.
and Patelski, R. A., hydroxy- and methoxy-phenylidihydroanthracenes, II, 16. Hydroxy- and methoxy-phenylanthrones. I. and II., II, 25.
- Willard, H. H., and Taras, J. T., arsonium compounds. II, II, 130.
and Zienty, F. B., antispasmodics. II.—IV., II, 106, 254.
- Blidin, V. P. See Makarov, S. Z.
- Blinc, M. See Samec, M.
- Blinks, L. R., Darsie, M. L., jun., and Skow, R. K., bioelectric potentials in *Helicystis*. VII. Effects of low oxygen tension, III, 210.
- Bliss, C. I., and Marks, H. P., biological assay of insulin. I. Precision of curve relating dosage and graded response, III, 734.
- Bliss, E. A., Feinstein, W. H., Garrett, A. W., and Long, P. H., sulphapyridine and sulphanilamide in experimental pneumococcal, meningococcal, Welch bacillary, and Friedländer's bacillary infections in mice, III, 1081.
and Long, P. H., comparison of bacteriostatic effects of sulphanilamide and sulphapyridine (2-sulphanilylamino-pyridine) on bacteria in broth cultures, III, 411. Comparative therapeutic effects of sulphapyridine in experimental *Staphylococcus aureus* infections in mice, III, 858.
See also Long, P. H.
- Blithe, M. D. See Gammon, G. D.
- Blix, G., hexoamine-containing substance in the protagon fraction of brain, III, 251. Separation of serum-globulins by electrophoresis, III, 652.
- Bloch, E., and Elderfield, R. C., *allostrophanthidin*, II, 437.
See also Bloch, L., and Sobotka, H.
- Bloch, F. See Bradbury, N. E., and Rist, N.
- Bloch, K. See Bovarnick, M.
- Bloch, L., and Bloeh, E., spectrum of tellurium in the extreme ultra-violet, I, 166.
- Bloch, E., and Kouang-Tao, L., spark spectrum of silver *in vacuo*, I, 347.
- Bloch, E., and Walden, R., far ultra-violet spectrum of thallium, I, 167.
- Bloch, M. See Dufay, J.
- Bloch, O., jun., simple blood pipette cleaner, III, 546.
- Blochina, A. N. See Kursanov, D. N.
- Blochintzev, D. I., and Davidov, B., theory of solid rectifiers, I, 181.
- Leontovitch, M. A., Tamm, I. E., and Frenkel, J., generalisation of fundamental equations of aerodynamics and electrodynamics, I, 242.
- Block, L. H., utilisation of dogs in experimental proctology, III, 691.
- Block, L. P. See Simons, J. H.
- Block, M. See Goldstein, D.
- Block, P. W., pathogenesis of functional meno- and metro-rhagia of adolescence, III, 979.
- Block, R. J., keratins; amino-acid composition of hair, wool, horn, and other eukeratins, III, 597.
and Bolling, (Miss) D., amino-acid composition of the keratins; composition of gorgonin, spongin, turtle scutes, and other keratins, II, 234. Chemistry and metabolism of phenylalanine. I. Nitration, II, 423. Micro-determination of threonine, II, 527.
- Blodgett, (Miss) K. B., interference to extinguish reflexion of light from glass, I, 238.
- Blois, E. H., social services and public health, III, 619.
- Blom, J., and Bak, A., determination of amylases by the liquefaction of starch paste, III, 323.
- Blomfield, G. W., pituitary extract in the third stage of labour, III, 137.
- Blommers, J., short-wave irradiation of isolated heart, III, 895.
- Blomqvist, G., calculation of the kinetics of hydrolysis of polysaccharides; mathematical expressions and results, I, 527.
- Blondin, S. See Vallery-Radot, P.
- Blonskaia, A. A. See Kroupsky, A. I.
- Blood, W., feet of industrial worker; foot clinics, III, 619.
- Bloom, A., and Day, A. R., preparation of 2-alkylaminobenzimidazoles, II, 285.
- Bloom, B., use of potassium salts in hay fever, III, 417.
- Bloom, F., classification and pathology of renal disease in dog; comparison with nephritis in man, III, 1060.
- Bloom, M. C., mechanism of the genesis of polymorphous forms, I, 532.
- Bloomberg, E. See Albright, F.
- Bloomberg, W., treatment of chronic alcoholism with amphetamino (benzedrine) sulphate, III, 615.
- Bloomfield, J. J. See Flinn, R. H.
- Blotevogel, H., and Tonutti, E., vitamin-B₁ and detoxication [in burns], III, 766.
- Blotner, H., concentration of a volatile reducing substance in blood and urine of diabetics, III, 555. Alcohol-tolerance tests in normal individuals and in patients with diabetes mellitus and diabetes insipidus, III, 608.
See also Gibson, J. G., jun.
- Blount, R. F., heteroplastic transplantation of the hypophysis between different species of *Amblystoma*, III, 905.
- Blumberg, J. B., and Zdanovski, A. B., solubility in the system $(\text{NH}_4)_2\text{SO}_4 + 2\text{HCl} = \text{H}_2\text{SO}_4 + 2\text{NH}_4\text{Cl}$ at 25°, I, 612.
- Blümel, F. See Abrahamczik, E.
- Blum, E. See Buck, F.
- Blum, E. (Wien). See Schmid, L.
- Blum, H. E., and Morgan, J. L., photodynamic haemolysis. III. Percentage haemolysis curve, III, 813.
- Blum, H. F., domestic animal diseases produced by light, III, 319.
and Hyman, C., photodynamic haemolysis. IV. Effect of light intensity. V. Effect of concentration of dye on haemolysis time, III, 813.
- Blumberg, H., Shelling, D. H., and Jackson, D. A., production of manganese rickets in rats, III, 169.

- Blumberger, J. S. P., azo-chromophore. VIII, II, 474.
- Blumberger, K., and Kruskemper, C., acute digitalis poisoning, III, 309.
- Blumenfeld, C. M., periodic and rhythmic mitotic activity in the kidney of the albino rat, III, 644. Effects of ovariectomy on the adrenal glands of the albino rat, III, 682.
- Blumenthal, E., theory of the fractionation of gaseous mixtures by diffusion; characteristics of the Hertz mercury-vapour pump, I, 225.
See also Herbert, J. B. M.
- Blumenthal, H. T., effects of organismal differentials on the distribution of leucocytes in the circulating blood, III, 447.
- Blumenthal, M., action of water vapour on amalgamated aluminium, I, 483. and Sotirowa, Z., thermal dissociation of cerous carbonate, I, 270.
- Blumgart, H. L., recovery of a patient with undulant fever treated with sulphanilamide, III, 304.
- Blumschein, Z. N., Ish River mineral springs, I, 342.
- Blumstein, A. See Eklund, C. M.
- Blunschy, A. See Vannotti, A.
- Bluntschli, H., sublingua and lytta of the lemur tongue, III, 223. Peculiar palatal organ in the nestling of the Madagascar bush cuckoo, *Coua cristata*, L., III, 542.
- Blyth, J. S. S. See Greenwood, A. W.
- Boam, J., and Cahn, R. S., Buckley's substance, m.p. 183°, from *Derris* extract, II, 33.
- Boas, I., peptic ulcer therapy, III, 311.
- Boas, L. C. See Collens, W. S.
- Bobaschinskaja, T. S., and Kotscheschkov, K. A., study of the action of hydrogen chloride on aromatic tin organic compounds of the type $\text{SnAr}_2\text{Ar}'$, with the object of establishing a series of relative electronegativity of certain radicals, II, 293.
- Bobischew, M. D. See Magidson, O. J.
- Bobkoff, G. See Berghé, L. van den.
- Bobrański, B., syntheses in the series of chemotherapeutically active derivatives of sulphanilamide, II, 179.
- Bobrański, R., Kochańska, L., and Kowalewska, A., action of sulphuryl chloride on pyridine oxide, II, 35.
- Bobrovnikoff, N. T., interpretation of molecular spectra and study of molecular spectra in celestial objects. VIII. Molecular bands in stellar spectra, I, 354.
- Bobtelsky, M. M., and Kirson, B., catalytic decomposition of hydrogen peroxide in presence of ferric citrate, I, 423. and Simchen, A. E., conductometric study of solutions containing citrate and ferric ions, in presence and absence of hydrogen peroxide, I, 421.
- Bocciarelli, D. See Bernardini, G.
- Bochet, M. See Binet, L.
- Bock, E., and Oesterlin, M., observations with the fluorescence microscope, III, 873.
- Bock, F., and Wetter, F., antirachitic provitamins of invertebrates, III, 77. See also Windaus, A.
- Bock, H. E., and Jombers, P., clinical importance of red cell size, III, 811.
- Bockemuller, W., and Pfeuffer, L., induced peroxide formation during the bromination of olefines, II, 96.
- Bockhorn, K., chemotherapy of erysipelas III, 710.
- Bodaleva, N. V. See Novoselova, A. V.
- Bodansky, M., chemical procedures used in clinical diagnosis, III, 695.
- Campbell, K., and Ball, E., changes in serum-calcium, -inorganic phosphate, and -phosphatase activity in pregnant women, III, 355.
- and Duff, V. B., regulation of the level of calcium in the liver during pregnancy, III, 485.
- Herrmann, C. L., and Campbell, K., utilisation [by rats] of polyglyceryl esters, III, 71.
- Bodansky, O., energy of activation of hydrolysis of sodium β -glycerophosphate by bone-phosphatase at optimal p_H , III, 872.
- Bodart, F., and Klima, R., treatment of iron-resistant anaemia with complex inorganic iron compounds, III, 547.
- Boddington, G. D. M. See Greey, P. H.
- Boddy, R. G. H. B., deposition of coal seams; microscopic study, I, 48.
- Bode, G. See Michael, F.
- Bodendorf, K., and Senger, N., attempted preparation of sulphoacetic urcides, II, 204.
- Bodenstein, D., imaginal differentiation inaugurated by oxygen in *Drosophila* pupae, III, 395.
- Bodenstein, J. C., composition and by-products of pineapples, III, 733.
- Bodenstein, M., effect of development of apparatus and technique on our knowledge of atoms and molecules, I, 56. Mechanism of formation of nitric oxide in the electric arc, I, 272. Calculation of the rate of composite reactions, I, 375.
- and Winter, E., hydrogen-chlorine reaction. I. Significance of the course of the reaction with oxygen-free gases, I, 378.
- Bodfors, S., "tetraphenyltetracarbazone." II. Action of phenylhydrazine on ω -halogeno-ketones, II, 209.
- Bodin, M. A., volumetric and potentiometric determination of hydrogen peroxide and persulphuric acids present together, I, 275.
- Bodine, J. H. See Ray, O. M., and Thompson, V.
- Bodnár, J., Szép, E., and Cielešky, W., volumetric determination of very small amounts of arsenic even in the presence of antimony, I, 215.
- and Tanko, B., role of phosphate in alcoholic fermentation in higher plants, III, 436.
- Bodrour, D., preparation of true acetylene hydrocarbons, II, 295.
- and Thomassin, R., derivatives of *o*- and *p*-cyclohexylphenols, II, 311. Syntheses in the phenylcyclohexane series, II, 478.
- Bodrova, N. B., innervation of the electric organ of *Raja clavata*, III, 132.
- Bodunkov, B. I. See Rusanov, A. K.
- Bocker, O. E., bactericidal action of garlic (*Allium sativum*), III, 797.
- Boedecker, F., and Ludwig, H., oilisol, a lipotropic bismuth preparation, III, 414.
- Boeseken, J., sterical conditions in cyclic isopropylidene ethers of *o*-diphenols, II, 210. Mobility of the cycloheptane ring and configuration of the cycloheptane-1:2-diols, II, 477.
- Boeseken, J. [with De Bruin, J. A., and Rijswijk, W. E. van], influence of 1:8-dihydroxynaphthalene on electrical conductivity of boric acid, I, 147.
[with Gonggrijp, J. H., and Rhijn, A. E. A. van], influence of saligenin (*o*-hydroxybenzyl alcohol) and its 5-methyl derivative on the electrical conductivity of boric acid, I, 147.
- and Greup, J., oxidation of derivatives of vanillin with peracetic acid, II, 313.
- and Roos, J. B., *m*- and *p*-bis-(5'-keto-2':3'-dimethyl-1'-pyrazolyl)benzene ("m- and p-diantipyrine"), II, 185.
- and Smitt, L. G., oxidation of 1:8-dihydroxynaphthalene and its monomethyl ether with peracetic acid, II, 153.
- Böger, A., and Wezler, K., circulation in hypertension, III, 658.
See also Wezler, K.
- Böhm, F., production of indoxyl from *o*-nitroacetophenone in the animal organism, III, 302. Thormahlen's reaction, III, 487. Compounds of the *o*-nitrocinnamic acid series which produce indoxyl *in vivo*, III, 773.
- and Grüner, G., tuberculous antibodies in human serum, III, 1104.
- Boehm, G., protein molecule, III, 785.
- and Ekert, F., roentgenological studies on action of baths on heart of healthy subjects, III, 19.
- Böhm, Jaroslav, sulphonation of 5:6-benzoquinoline, II, 227. 5:6-Benzoquinoline derivatives, II, 283.
- Böhme, A., recovery metabolism in silicosis, III, 193. Silicosis, III, 513. Influence of physical work on minute volume of respiration in healthy and silicotic subjects, III, 781.
- Böhme, H. [with Siering, O.], influence of structure on the rate of racemisation of organic halogeno-compounds, II, 2.
- and Pietsch, G., stearoptens of orange-peel oil. I, II, 32. Auraptin, II, 278.
- and Schneider, E., micro-mol. wt. determination by Rast's method, I, 162. Oxidative degradation and constitution of auraptin, II, 278.
- Böhmig, R., and Schroder, W., comparison of primary and secondary tumours in adenocarcinoma, III, 599.
- Boehncke, H., treatment of spasm of pylorus, III, 1058.
- Boehringer, F., nuclei and development of the merogonic bastards *Triton* ♀ × *Salamandra* III, 346.
- Boek, H., Q-T interval in the electrocardiogram in diphtheria in children, III, 17.
- Boell, E. J. See Needham, J.
- Boelter, M. D. D. See Greenberg, D. M.
- Boenheim, F., endocrine therapy of parodontosis, III, 38.
- Boer, J., antirachitic action of butter, III, 291.
- Boeri, E., rapid changes in transparency of active muscle, III, 26.
- Boerner, F., Jones, C. A., and Lukens, M., preparation of an antigen for use in complement fixation test for syphilis, III, 727.
- and Lukens, M., simplified complement fixation technique for the serological diagnosis of syphilis, III, 430.
- Börnstein, W., action of "bright" and "dark" stimuli on melanophores, III, 596.
- Boersch, H., "shadow"-microscope, a new electron-microscope, I, 492.

- Boestad, G., Pedersen, K. O., and Svedberg, T., design and operation of the oil-turbine ultracentrifuge, I, 46.
- Boetius, M., microanalytical determination of mercury in organic and inorganic compounds; accurate determination in presence of chlorine, bromine, iodine, nitrogen, and sulphur, II, 132.
- Böttcher, C. J. F., dipole moment of a free molecule from data of the pure dipole liquid, I, 126.
- Bœuf, C. F., salinity of the waters of the Orne between Caen and the mouth (Franceville), I, 342.
- Bogaert, A. van, [heart changes in] alcoholic beriberi, III, 602.
- and Baarle, F. van, vasopressor and gonadotropic pituitary hormones in hypertension, III, 46. Hypophyseal activity in experimental hypertension, III, 822.
- Bogaert, L. van, [histopathology of] experimental trypanosomiasis, III, 831.
- Dallemagne, M. J., and Wégria, R., effects of chronic and acute oxygen lack on *Macacus rhesus*, III, 564.
- and De Buscher, J., inflammatory sclerosis of cerebral white matter, III, 831.
- and Dewulf, A., necrotic miliary process of unknown origin in *Macacus rhesus*, observed clinically as blindness, III, 468.
- and Scherer, H. J., acute amaurotic epilepsy in *Macacus rhesus*, III, 250.
- See also Dow, R. S., and Lecouturier, R.
- Bogaert, R. See Lederer, J.
- Bogan, E. J., meniscus reader, I, 494.
- Bogan, I. K. See Marble, A.
- Bogart, C. N., nicotinic acid in the treatment of pellagra, III, 166.
- Bogart, R. See Rasmussen, R.
- Bogatski, V. D., influence of structure of alcohols on the velocity of chemical processes, I, 526.
- Bogdan, E. See Matei, I.
- Bogdan, P., the Trouton-Deprez rule; molecular association at the critical temperature, I, 248. Parachor, I, 455.
- Bogdanov, I. F., and Baschkirova, E. I., selective catalysis. III. Influence of solvents on selective hydrogenation of unsaturated compounds, II, 198.
- Bogdanov, K. A., iodate method of determination of barium and lead in salts, I, 98.
- Bogdanov, S. I., and Ivanova, V. A., sulphonation with sulphites. III. Simultaneous oxidation of sodium sulphite and β -naphthol and its derivatives, II, 260.
- Bogdanov, V. A., and Mikriukov, S. M., changes in coagulability of blood in peptone shock in dogs, III, 354.
- Bogdanova, A. V. See Schorigin, P. P.
- Bogert, M., [synthesis of condensed polynuclear hydrocarbons by cyclodehydration of aromatic alcohols. VII. Cyclodehydration involving the Wagner rearrangement], II, 111.
- See also Cassaday, J. T., Fetscher, C. A., Fox, H. H., Levitz, M., Orcutt, R. M., Sterling, E. C., and Werner, J.
- Bognár, R. See Zemplén, G.
- Bogojavlenskaja, A. See Erofeev, B. V.
- Bogojavlenski, A. F., taking of samples for study of kinetics of chemical reactions in liquid media, I, 45.
- Bogomoletz, A., shock problem, III, 363.
- Adrenal diabetes, III, 378.
- Bogomoletz, O. O., influence of anti-reticular cytotoxic serum on healing of fractures. I., III, 119.
- Bogomolova, L. G. See Petrov, I. R.
- Bogoslovski, B. M., preparation of anisylidene-*p*-aminobenzonitrile, II, 263.
- Bogoslovsky, A. I., dependence of contrast sensitivity of the eye on adaptation, III, 904.
- Bogue, J. Y., Evans, C. L., and Gregory, R. A., effect of adrenaline and acute anoxia together on the heart-glycogen, III, 896.
- and Gregory, R. A., simplified heart oxygenator circuit, III, 896.
- Boguslavskaja, B. E., compounds of titanium sulphate. I. and II., I, 622.
- Boguslavskaja, S. M. See Prokopetz, E. I.
- Bohanan, E. H., effects of environmental factors on length of the oestrous cycle in the rat, III, 381.
- Bohr, D. F. See Bean, T. W.
- Bohr, N., disintegration of heavy nuclei, I, 233. Resonance in uranium and thorium disintegrations and the phenomenon of nuclear fission, I, 234.
- Peierls, R., and Placzek, G., nuclear reactions in the continuous energy region, I, 546.
- and Wheeler, J. A., mechanism of nuclear fission, I, 595.
- See also Aston, F. W.
- Boilot, Y., and Choay, A., survival of adrenalectomised rats, III, 977.
- Boischot, P. See Vincent, V.
- Boismoreau. See Laroche, G.
- Boissevain, C. H., Drea, W. F., and Schultz, H. W., isolation and determination of riboflavin produced by tubercle bacilli in culture media, III, 431.
- Boisson, R. See Fleury, P.
- Boissonnas, C. G., binary mixtures; calculation of partial vapour pressures from the total pressure, I, 371. Heat of solution of normal paraffins, I, 567.
- See also Meyer, K. H.
- Boivin, A., somatic antigens of the typhoid bacillus; comparative vaccinating action of the sugar-lipin O- and Vi-antigens of Eberth's bacillus, III, 632. Fractionation of the antigen O-endotoxin of Eberth's bacillus by ultracentrifuging, III, 1013.
- Izard, Y., and Sarciron, R., somatic antigens of the typhoid bacillus; determination of the sugar-lipin O- and Vi-antigens in *B. typhosus*; independence, manifested by the sugar-lipin O- and Vi-antigens during variations undergone by the bacillus; role of the sugar-lipin O- and Vi-antigens in the virulence of the bacillus and anti-infectious value of the corresponding antibodies, III, 878, 1013.
- and Mesrobian, L., resistance of the flagellate antigen (antigen-H) of the typhoid bacillus to trichloroacetic acid and possible chemical nature of this antigen, III, 207.
- and Richou, R., preparation of anti-typhoid serum for therapeutic use, III, 796.
- Boje, O. See Bang, O.
- Bojinesco, A., electronic field emission obtained during bombardment of aluminium oxide by electrons or negative ions, I, 446. Energy distribution of secondary electrons at low temperatures, I, 590.
- Bojlen, K., diabetic children on unrestricted diet, III, 925.
- Bok, L. D. C., and Geib, K. H., hydrogen exchange in aqueous solutions of acetic acid and acetates, I, 204.
- Boki, G. B., number of physically simple crystal forms, I, 243.
- See also Kurnakov, N. N.
- Bokil, K. V. See Raval, J. D.
- Bokor, G. See Steinkopf, W.
- Boku, S., Hirai, I., and Gon, K., effect of splenic function on blood constituents and blood-coagulation factors; erythrocyte, haemoglobin content, leucocytes, blood platelets, and blood coagulation, III, 15.
- Bolam, T. R., and Currie, A. B., ionic interchange in sulphur sols. IV. Action of multivalent metallic ions, I, 261.
- and Taylor, W., colloidal Prussian-blue, I, 75.
- Boland, C. R., Craig, N. S., and Jacobs, A. L., collection and transfusion of preserved blood, III, 353.
- Boland, E. W., and Willins, F. A., liver changes produced by chronic passive congestion, III, 273.
- Bolas, B. D., Melville, R., and Selman, I. W., measurement of assimilation and translocation in tomato seedlings under conditions of glasshouse culture, III, 105.
- Bold, H. C., nutrition of the sporophyte in the Hepaticæ, III, 1110.
- Boldireva, N. See Borovskaja, V.
- Boldyreff, W. N., Lewis, W. B., and Stewart, C. E., dried natural digestive juices, III, 723.
- and Martin, W. F., operation for production of a permanent closeable pancreatic fistula, III, 690.
- Bolger, M. See Ungar, Georges.
- Boling, J. L., and Blandau, R. J., oestrogen-progesterone induction of mating responses in the spayed female rat, III, 1053.
- and Hamilton, J. B., effect of synthetic male hormone substance on follicular growth and ovulation in the guinea-pig, III, 589.
- Bolle, J. See Vavon, G.
- Bolle, P. See Stoll, M.
- Bollenrath, F. See Bungardt, W.
- Boller, R., treatment of painful obesity (Dercum's disease), III, 499. Modern diabetes therapy, III, 681. Treatment of obesity and leanness, III, 701.
- and Pilgerstorfer, W., blood-sugar and protamine-zinc-insulin, III, 141.
- Pilgerstorfer, W., and Exner, M., treatment of obesity, III, 397.
- Bollettino, A. See Piacentini, V.
- Bolliger, A., chemistry of the reaction of creatinine with 3:5-dinitrobenzoic acid, II, 101. Volumetric determination of organic picrates and picrolonates with methylene-blue, II, 398.
- and Renter, F., reaction of 3:5-dinitrobenzoic acid with alkali. I. Isolation and constitution of the compound giving a red colour with alkali, II, 478.
- Bolling, (Miss) D. See Block, R. J.
- Bollman, J. L., and Flock, E. V., pyruvate in working muscles of normal and vitamin-B₁-deficient rats, III, 1078.
- See also Flock, E. V., Goudsmit, A., jun., and Kendall, E. C.
- Bollman, V. L., Bailey, H. H., and Du Mond, J. W. M., plural X-ray reflexion methods applied to problem of the diffraction pattern of calcite, I, 64.

- Bollman, V. L., and Du Mond, J. W. M., validity of X-ray crystal methods of determining e , I, 113.
- Bolomey, P., glutathione and alcoholic fermentation. I. Glutathione in yeasts, III, 1097.
See also Haag, E.
- Bolotov, M. P., determination of arsenic with the use of amalgamated aluminium in place of zinc, I, 38.
- Bolschuchin, A. I. See Venus-Danilova, E. D.
- Boltjes, T. Y. K. See Turfreiher, A.
- Bolze, J. See Hasché, E.
- Bombelli, A. A., formation of sodium polyarsenophosphates, I, 153. Thermal study of fused mixtures of sodium metaphosphate and pyroarsenate, I, 371. Sodium polyarsenophosphates and specific conductivity of their aqueous solutions, I, 564.
- Bomford, R., anaemia in myxoedema, III, 115.
- Bomke, H. See Reddemann, H.
- Bommer, H., lattice constants of C-forms of oxides of rare-earth metals, I, 359. Magnetochemical studies. XXXIV. Magnetic behaviour of scandium, yttrium, and lanthanum, I, 360.
and Hohmann, E., density measurements on earth metals, I, 362. Heats of solution of anhydrous chlorides of the rare earths, I, 566.
See also Klemm, W.
- Bommer, S., dietary treatment of skin diseases, III, 282. Dietary problems, III, 1064.
- Bompard, E. See Laroche, G.
- Bomskov, C., and Schneider, Erich, adrenal cortex and obesity, III, 477. Relation of vitamin-E to thyroid and ovary, III, 769.
- Bonauguri, E., vector model of the atom and theory of rotations, I, 547.
- Bond, C. J., differential sensitivity of somatic tissues to the male sex hormone in two Br. Leg. \times R.I. hens, III, 54.
- Bond, G., fixation and transfer of nitrogen in the soya bean, III, 532.
- Bond, P. A., and Weaver, G. A., jun., stable sulphur dithiocyanate, I, 36.
- Bondareva, S. P. See Goldstein, B.
- Bondin, S. M. See Tronev, V. G.
- Bonet-Maury, P., measurement of α and β activity with a cell with a barrier layer, I, 159.
and Olivier, H. R., polonium and cowpox virus, III, 335. Biological properties of the tubercle bacillus after treatment with radon, III, 1104.
See also Olivier, H. R.
- Bonhoeffer, K. F., Geib, K. H., and Reitz, O., rate of ionisation in aqueous solution of the carbon-hydrogen bond in aliphatic compounds, I, 564.
See also Günther, G.
- Bonhomme, F. See Weekers, L.
- Boni, I. See Porri, G.
- Boni, M. D., establishment of structure of hydrocarbons of the C_nH_{2n-2} series, II, 197.
- Bonifaci, P. See Mosinger, M.
- Bonino, G. B., polarisation and resonance in the study of aromatic nuclei; benzene and substituted benzenes, I, 552.
and Manzoni-Ansidel, R., Raman spectra of aliphatic hydrocarbons, I, 121. Raman spectrum of *o*-deuteroxybenzaldehyde, I, 241.
- Bonjart, M. See Mercier, F.
- Bonjean, P. See Courtois, J.
- Bonnard, A. See Peyron, A.
- Bonnardel, R., action of nicotine on electrical stimulation of muscle, III, 181.
- Bonneman, P., salts derived from triphosphoric acid, I, 532.
- Bonner, D. M., and Haagen-Smit, A. J., leaf-growth factors. II. Activity of pure substances in leaf growth, III, 801.
- Bonner, J., thiamin and the growth of roots; relation of chemical structure to physiological activity, III, 1110.
and Buchman, E. R., synthesis and destruction of vitamin-B₁ by *Phycomyces*, III, 791.
and English, J., jun., traumatin, a plant wound hormone, III, 215.
and Erickson, J., *Phycomyces* assay for thiamin: method and specificity, III, 1098.
See also Addicott, F. T., and English, J., jun.
- Bonner, L. G., and Hofstadter, R., infrared absorption spectra and approximate force constants of propene and allene, I, 300.
- Bonner, T. G., Evans, D. P., and Watson, H. B., medium effects in the prototrophy of ketones; kinetics of the bromination of acetone and acetophenone in aqueous acetic acid, I, 527.
- Bonner, T. W., formation of helium of mass 3 in an excited state, I, 397.
- Bonnet, G., monochlorinated derivatives of pinane, II, 169.
- Bonnet, H., and Leblois, C., preparation of a culture medium with eggs containing bacteria; sterility of the medium, III, 337.
- Bonnet, R., Fournel, J., and Terroine, T., action of oxidising and reducing substances on nitrogenous metabolism, III, 91.
- Bonnet, V., ganglionic nervous system of crustaceans, III, 569.
and Bremer, F., mechanism of central inhibition, III, 829.
- Bonnycastle, D. D. See Lucas, G. H. W.
- Bonot, A., non-precipitable fraction of a system of specific antibodies, III, 1014.
See also Sadron, C.
- Bonsdorff, B. von, liver extract exposed to action of intestinal worms does not lose its anti-anæmic effect, III, 959. Neurogenic heart lesions, III, 965. Less common causes of heart disease, III, 965. Influence of intestinal worms on proteolytic activity *in vitro* of trypsin, papain, and pepsin and human gastric juice at neutral reaction, III, 986.
- Bonser, G. M., and Connal, K. I., effect of presence of a malignant tumour on development of a second malignant tumour, III, 489.
and Orr, J. W., morphology of 160 tumours induced by carcinogenic hydrocarbons in subcutaneous tissues of mice, III, 845.
See also Robson, J. M.
- Bonte, A., origin and genesis of the Oxford iron ore of Neuviy (Ardennes), I, 226. Evolution of calcium phosphate in the Toarcien de l'Echelle (Ardennes), I, 499.
- Bontoux, Y. See Mosinger, M.
- Bonvallet, M., and Minz, B., effect of eserine and atropine on linguo-maxillary reflex response elicited by stimulation at different frequencies, III, 84. Effect of anaesthesia on linguo-maxillary reflex, III, 969.
See also Le Beau, J.
- Boochs, H., electron interference, I, 130. Exact determination by means of electron beams of lattice constants for different sizes of crystallite, I, 407.
- Booher, L. E., Callison, E. C., and Hewston, E. M., determination of minimum vitamin-A requirements of normal adults, III, 1069.
and Williams, D. E., biophotometer as a means of measuring the vitamin-A status of human adults, III, 164.
- Boomer, E. H., Johnson, C. A., and Piercey, A. G. A., equilibria in two-phase, gas-liquid hydrocarbon systems. IV. Methane and heptane, I, 80.
- Boon, S. D., system acetamide-phenol, II, 364.
- Boon, T. H., aplastic anaemia with complete recovery, III, 6.
- Boonstra, B., influence of cathodic and anodic polarisation on rate of solution of metals, I, 270.
- Boor, A. K., and Miller, C. P., action of keten on gonococcus and meningococcus, III, 1101.
- Boorsma, H. J. See Prévot, A. R.
- Boot, N. I., activity [and nerve supply] of face sweat glands, III, 827.
- Booth, E. T., Dunning, J. R., and Slack, F. G., delayed neutron emission from uranium, I, 350. Uranium fission fragments, I, 398.
See also Anderson, H. L., and Grosse, A. V.
- Booth, H. S., and Bozarth, A. R., fluorination of phosphorus trichloride, I, 622.
and Dutton, F. B., fluorination of phosphoryl trichloride, I, 623.
and Frary, S. G., fluorination of phosphorus tribromide, I, 623.
- Booth, L. M., rational method of stating pH , I, 262.
- Booth, T. E. See Sommer, A. L.
- Booth, V. H. See Roughton, F. J. W.
- Boothby, W. See Adams, M.
- Boothby, W. M. See Lovelace, W. R.
- Booy, H. L. See De Jong, H. G. B.
- Boppel, H. See Freudenberg, K.
- Boquet, A., and Sandor, G., tuberculin activity of organic constituents of tubercle bacillus, III, 431.
and Stamatini, N., inhibition of anthrax by substances producing inflammation at the site of inoculation, III, 874.
- Boquet, M. See Bourgeois, P.
- Boquet, P., rôle of copper in attenuation of viper (*Vipera aspis*) venom by hydrogen peroxide, III, 715, 870.
See also Césari, E.
- Borczsák, L. See Illényi, A.
- Bordet, P., growth factors and toxigenicity, III, 105.
- Boršner, C. A., and Nelson, J. M., oxidation of *p*-cresol by means of tyrosinase, II, 379.
- Borek, E. See Waelsch, H.
- Borelius, G., theory of the transition of metallic mixed phases. V. Fluctuations and formation of nuclei in supercooled phases, I, 17.

- Borelius, G., transition between organisation and disorganisation in metallic phases, I, 137.
- Borers, E., experiments on fibrous structure of the sclera, III, 737.
- Boresch, K., curling of [plant] tendrils under influence of artificial heteroauxin, III, 437.
- Borg, H. ter, Purkinje tissue in the atria of domestic animals (especially the horse), III, 16.
- Borgard, P. See Voit, K.
- Borgars, D. J. See Lambert, B.
- Borgatti, G., pharmacodynamics of *Passiflora incarnata*, L., III, 866.
See also Moruzzi, Giovanni.
- Borghello, N., dismutation of the carbonyl oxygen atom of aldehydes and ketones, II, 6.
- Borghese, E., the human scapula and neighbouring parts, III, 223.
- Borghesi, B., [oxidative deamination of arginine by skin of rat], III, 706.
and Tarantino, C., presence in skin of a histidine-splitting enzyme, III, 322.
- Borgstrom, G., citrate in Crassulacean leaves, III, 216. Formation of cleistogamic and chasmogamic flowers in wild violets as a photoperiodic response, III, 1110.
- Borgstrom, L. H., fluorescence of Finnish minerals in ultra-violet light, I, 628.
- Boriani, A., antagonism between magnesium and calcium and the possible substitution of these metals by strontium, III, 409. Spinal respiration, III, 563. Medullary respiratory centres, III, 563. Action of strontium on circulation and respiration, III, 616. Pharmacology of strontium. III. Action on smooth muscle fibres, III, 715. Action of strontium on bronchial motility, III, 718.
and Boriani, G., pharmacology of strontium. IV. Emetic action, III, 934.
- Boriani, G. See Boriani, A.
- Borisov, M. D., Brailovski, V. P., and Leipunski, A. I., primary ionisation with fast electrons in nitrogen, I, 168.
- Borisov, P. I., isoelectric zone of colloids of grey matter of human cortex, III, 970.
- Borissov. See under Borisov.
- Bork, A., poisoning of catalysts from the point of view of specificity of active centres. VI. Temperature-dependence of the relative duration of stay of water and ethyl alcohol molecules on copper. X. Orientation of molecules on the surface of the catalyst during the dehydrogenation, on copper, of alcohols of the series $C_nH_{2n+2}O$, I, 34, 207.
- and Tolstopjatova, A. A., poisoning of catalysts from the point of view of specificity of active centres. VII. Kinetics of the dehydration of ethyl alcohol on aluminium oxide. VIII. Orientation of the molecules of the aliphatic alcohols $C_nH_{2n+2}O$ in the dehydration of the alcohols on aluminium oxide. IX. Influence of methyl substituents on the activation energy of the dehydration of the aliphatic alcohols $C_nH_{2n+2}O$ on aluminium oxide, I, 34.
- Borland, J. E. See Brown, O. W.
- Borley, W. E., and Tainter, M. L., effect of dinitrophenol on production of cataracts by lactose, III, 472.
- Borman, E. K. See Welch, H.
- Bormann, O. See under Pintsch Komm.-Ges., J.
- Born, M., thermodynamics of crystals and melting, I, 552.
- Born, P. See Wagner-Jauregg, T.
- Borneman-Starinkevitch, I. D., isomorphic substitutions in apatite, I, 342.
- Borocco, A. See Hackspill, L.
- Borodina, O. J. See Michlin, D. M.
- Boros, B., effect of extracts of iris and ciliary body on intraocular pressure, III, 1040. Bilateral holes at macula in Mongolian idiot, III, 1041.
- Borovik, S. A., and Burova, T. A., content of rare earths in the Kara-Tau phosphorites, I, 107. Content of rare and other elements in the cassiterites of different genesis from U.S.S.R. deposits according to spectro-analytical data, I, 499.
- Borovik-Romanova, T., effect of sodium, potassium, and lithium salts introduced into the flame on the intensity of the rubidium line, I, 227.
- Borovskaja, V., and Boldireva, N., tyrosine and tryptophan contents of brain-protein in vertebrates. III, III, 471.
and Tustanovski, A., tyrosine and tryptophan contents of brain-protein in vertebrates. II, III, 471.
See also Kaplanski, S.
- Borovski, M. L., embryonic and postembryonic development of the cortex of the anterior central convolution in man, and postembryonic development of the motor zone of the cortex in cats. II, III, 806.
- Borowski, W. See Milobedzki, T.
- Borrel, C. See Cornubert, R.
- Borri, N., nerve supply of the cornea, III, 751. Malformation of the extremities, III, 955.
- Borries, B. von, and Ruska, E., properties of supermicroscopic images, I, 389. Electron ultramicroscope for research institutes, I, 626.
- Bormann, G., X-ray interferences of self-irradiated iron, I, 348.
- Borsche, W., and Doeller, W., heterocyclically substituted pyruvic esters. III. Quinoxaly-2-pyruvic esters and 3-methylquinoxaly-2-pyruvic esters. IV. Pyruvic esters from 1-methylbenzoxazole, 1-methylbenzthiazole, and 1-substituted 2-methylbenzimidazoles, II, 89, 91.
and Hahn, H., polynuclear, condensed systems with heterocyclic rings. IV., II, 227.
and Scriba, W., isobenzoxazoles. II., II, 454.
and Sinn, F., polycyclic condensed systems with heterocyclic rings. V. VI. 1:2:3:4:6:7-Tribenzacridine, II, 348.
and Vorbach, O., polynuclear, condensed systems with heterocyclic rings. III., II, 87.
- Borsetti, N., protective action of vitamin-C in poisoning by phenylquinolinecarboxylic acid, III, 403.
- Borshkovski, S. E., and Karpenko, M. K., metabolism of horses suffering from triehorexis. I. Chemical composition of the hair of healthy and diseased horses, III, 597.
and Kolomitschenko, M., effect of ordinary and chemically preserved ensilage on animal metabolism. III. Acid-base equilibrium of female rabbits, III, 153.
- Borshkovski, S. E., Michailova, V., and Kolomitschenko, M., effect of "basic" and "acidic" diets on animal metabolism. I. Variability of the productive action of starch equivalent in feeding with "basic" and "acidic" diets, III, 72.
Michailova, V. V., Kolomitschenko, M., and Karpenko, M. K., effect of "basic" or "acidic" diets on animal metabolism. III. Effect on nitrogen, phosphorus, and calcium metabolism during different seasons of the year, III, 80.
Smoljar, V. O., and Netschitailo, M. K., effect of "basic" and "acidic" diets on animal metabolism. II. Effect of "basic" and "acidic" diets on digestibility, III, 72.
- Borst, J. G. G., cause of hyperchloræmia and hyperazotemia in patients with recurrent massive hæmorrhage from peptic ulcer, III, 386.
- Borsuk, J. See Baginski, S.
- Bortels, H., importance of molybdenum, vanadium, tungsten, and other ash constituents for nitrogen-fixing and other micro-organisms, III, 328.
- Boruschko, M. S., and Laschko, N. F., structure of iron oxides obtained at low temperatures, I, 93.
- Bos, H. G., when is a substance oxidised, reduced, electro-oxidised, or electro-reduced? I, 621.
- Bos, J. G. See Lifschitz, I.
- Bosanquet, P. A. See Carter, A. G.
- Bosart, L. W., sp. gr. change per degree of temperature, II, 237.
- Bosch, F. M., effect of foreign ions on double mercuric thiocyanate reactions; (interference in microchemical reactions), I, 489.
- Boschi, G., circulation of cerebrospinal fluid and intrathecal therapy, III, 673.
- Bose, A. See Krishnan, K. S.
- Bose, D. M., and Mukherji, P. C., origin of colour of paramagnetic ions in solution. I. II. Fine structure of the absorption bands, I, 16, 558.
- Bose, J. See Bose, P. K.
- Bose, J. P., and De, U. N., relation of inorganic phosphate to carbohydrate metabolism in normal and diabetic subjects, III, 608.
- Bose, P. K., and Bose, J., natural flavones. III. Structure of tambulin, II, 385.
and Finlayson, H. H., psoralen from *Phebalium argenteum*, III, 218.
See also Späth, E.
- Bose, S. P. See Basu, K. P.
- Bosian, G. See Schanderl, H.
- Bosshard, W. See Hartmann, M.
- Bossong, G. See Florin, M.
- Bossuet, R. See Jolibois, P.
- Bost, R. W. See Kyker, G. C.
- Bosvine, J. R., toxicity of ethylene oxide to *Calandra oryzae*, *C. granaria*, *Tribolium castaneum*, and *Cimex lectularius*, III, 715.
- Boswell, J. G., and Whiting, G. C., polyphenol-oxidase system in potato tubers, III, 321.
- Bosworth, R. C. L., contact potential of nickel, I, 229.
- Bot, G. M. See Mes, M. G.
- Botezatu, M. See Claudatus, I.
- Bothe, W., rapid and slow mesotrons in cosmic radiation, I, 351.
and Gentner, W., wave-length relationship of nuclear photo-effects: the radioactive isotopes of selenium, I, 295.

- Bothe, W., Wetzel, R., and Wollschitt, H., registration calorimeter for larger animals, III, 498.
- Bothmer, A. von, relation of the cerebrospinal fluid (C.S.F.) sugar and blood-sugar, III, 374.
- Botrugno, C. See Corbellini, A.
- Bott, J., effect of positive ions on an electron current limited by space charge, I, 393. Limiting continuum of principal series of sodium, I, 393.
- Bott, P. A. See Richards, A. N.
- Botta, B., blood-glycolysis during avitaminosis-B, III, 766. Photodynamic hemolysis by chlorophyll, III, 813.
- Bottema, A. See Jaeger, F. M.
- Bottin, high obstruction of the small intestine in dogs, III, 63.
- Bottomley, A. C., and Folley, S. J., effect of androgenic substances on growth of the test and mammary gland in the immature male guinea-pig, III, 53. Effect of high doses of androgenic substances on weights of testes, accessory reproductive organs, and endocrine glands of young male guinea-pigs, III, 54.
- Botzaris, A., leucocyte formula in guinea-pigs inoculated with endemic typhus, III, 114. Hematological studies on 4 cases of endemic typhus, III, 114.
- Boucek, B., and Kucera, A., absorption and elimination of sulphates, III, 81.
- Boucher, J. See Chaminade, R.
- Bouchereau, P., constitution of organic salts of hexamethylenetetramine, II, 52.
- See also Bruere, P.
- Bouchet, M. See Jullien, A.
- Bouckaert, J. J., regulation of cerebral circulation, III, 660.
- Grimson, K. S., and Heymans, C., importance of carotid sinus and vago-sympathetic-aortic nerves in respiratory and circulatory responses of decerebrate cats to oxygen want, III, 564. Increase of blood pressure by perfusion of ischemic kidneys of hypertensive dogs, III, 897.
- Heymans, C., and Samaa, A., role of carotid sinus and vagal chemoreceptors in respiratory and vasomotor effects of hypoxaemia in anaesthetised and normal dogs, III, 125.
- See also Heymans, C.
- Bougault, J., Cattelain, E., and Chabrier, P., nickel amalgams, I, 138. Raney nickel. I, I, 152. Action of Raney nickel on organic sulphur compounds, II, 199.
- Bouillenne, R., action of phytohormones on growth, cell division, and organic genesis, III, 213.
- Bouillenne-Walrand, M., and Delage, L., vegetable pigments. I. Phycocyanin of *Phormidium uncinatum*, Gom., III, 219.
- and Prevot, P., Dixon and Keilin's manometric method for determining cell respiration, III, 171.
- Bouknight, J. W. [with Smith, George McPhail], addition products of metallic salts with sulphur and oxygen compounds, I, 154.
- Boulad, J. H., conductometric determination of nickel, I, 41.
- Boulanger, P. See Polonovski, M.
- Boullé, A. See Paris, Rene.
- Bouman, H. D., and Rijnberk, G. van, muscle sounds, III, 464.
- Bouman, J. See De Jong, W. F.
- Bouman, K. H., brain convolutions of the *Pithecanthropus erectus* of von Koenigswald, III, 643.
- Bound, M., and Richards, D. A., atmospheric oxidation of metals and alloys at different temperatures by electron-diffraction, I, 332.
- Bour, H. See Binet, L.
- Bourcart, J., definition of the ooze of estuaries, I, 628.
- Bourdillon, J., apparatus for rapid and accurate determination of low osmotic pressures, I, 281.
- Bourgeois, P., and Boquet, M., effect of castration and sex hormones on experimental tuberculosis, III, 60.
- Bourguignon, G., generalised muscular hypertrophy in myxoedematous adults, III, 840.
- Bourland, J. F. See Bowen, C. V.
- Bourne, G., progesterone and survival of adrenalectomised rats, III, 580.
- and Evans, C., four-lead electrocardiogram in angina of effort, III, 237.
- See also Zuckerman, S.
- Bourne, M. C., Campbell, D. A., and Pyke, M., cataract associated with hereditary retinal lesion in rats, III, 472.
- Campbell, D. A., and Tansley, K., hereditary degeneration of the rat retina, III, 472.
- Bourne, W., and Pauly, A. J., thiobarbiturates in obstetrics: pentothal and thioethamyl, III, 864.
- Bourrain, Y. See Laubry, C.
- Boursnell, J. C., Dangerfield, W. G., and Wormall, A., Bayer 205 (germanin) and antrypol. III. Determination and retention in the animal body, III, 307.
- and Wormall, A., Bayer 205 (germanin) and antrypol. IV. Retention in the animal body, III, 1000.
- Bousset, R., apparatus for reactions of organo-magnesium compounds, II, 360. Attempts at asymmetric syntheses, II, 361. Preparation of the hydrate of phenylglyoxal, II, 376.
- Boutaric, A., study of colloidal solutions by combined measurements of viscosity and optical density, I, 23. Study of transformations in colloidal solutions by simultaneous measurements of optical density and viscosity, I, 76. Law of mass action, I, 471. Fixation of dyes by constituents of serum, III, 553. Serum-proteins, III, 553.
- and Berthier, (Mlle.) P., decrease of surface tension of solutions with time, I, 256. Surface tension of saponin solutions, I, 368.
- and Breton, (Mlle.) J., depolarisation of light by coarse suspensions, I, 368. Depolarisation of light scattered by colloidal solutions, I, 610.
- and Roy, (Mme.) M., physicochemical study of action of alcohol on gum arabic solutions, I, 197. Neutralisation of colloidal hydrosols having an acid reaction, I, 197. Fluorescing power of uranine solutions as a function of their pH , I, 464. Changes in optical activity of protein solutions in an alkaline medium, III, 719. Rotatory dispersion of horse serum, III, 893.
- and Sarac, C., progressive change of colloidal solutions during flocculation, I, 370.
- Boutaric, A., and Thévenet, (Mlle.) S., viscosity of arsenic sulphide sols and Einstein's formula, I, 257.
- See also Brocq-Rousseau, D.
- Bouton, S. M., jun., inexpensive embedding oven for use in routine work on tissues, III, 546. Vitamin-C and ageing eye, III, 768.
- Boutry, G. A., and Gilled, P., photo-electric photometry; photo-emissive cell specially designed for high precision measurements, I, 538.
- Bouvetier, E. See Raymond, E.
- Bouvrain, Y., oxygen consumption and debt in cardiac cases, III, 896.
- Bouwkamp, C. J. See Kronig, R. de L.
- Bovarnick, M., Bloch, K., and Foster, G. L., analogue of thyroxine, II, 504.
- Boventer, K., *Bacterium bifidum*, III, 202.
- Bovet, D., De Lestrang, Y., and Fourneau, J. P., sympathomimetic action of phenylethylenediamines, III, 1001.
- Fourneau, E., Tréfouël, and Strickler, H., action of di-diethylaminoethoxydiphenyl (1262 F.) on fibrillation, III, 930.
- Tréfouël, J., Sterne, J., and Strickler, H., effect of 2-diethylaminoethoxydiphenyl (1262 F.) on induced fibrillation, III, 454.
- Tréfouël, J., Tréfouël, (Mme.) J., Nitti, F., and Hamon, V., mechanism of the action of di-(p-aminophenyl)sulphone (1358 F.), III, 409.
- See also Nitti, F., Sterne, J., and Tréfouël, J.
- Bowden, F. P., and Hughes, T. P., mechanism of sliding on ice and snow, I, 555.
- See also Agar, J. N.
- Bowden, S. T., free radical terminology, I, 61. Modified phase rule equation, I, 80. Free radicals and radical stability. I. Influence of the phenoxyl group on radical stability and merisation. II. Dimethoxytriphenylmethyls. V. Thermal stability of chloroformates and carbonates, II, 110, 156.
- and Butler, E. T., intermolecular forces in liquid systems. I. Physical properties of the alkyl carbonates. II. Viscosity, surface tension, and parachor relationships in binary systems, I, 136, 190.
- and Harris, W. E., free radicals and radical stability. IV. Diphenyl-3-acenaphthylmethyl, II, 148.
- Harris, W. E., and Roberts, D. I., free radicals and radical stability. III. 3:4-Methylenedioxytriphenylmethyl and phenyl-p-anisylidiphenylmethyl, II, 155.
- and John, T., free radicals and radical stability. VI. Reactions of triphenylmethoxides, II, 156.
- Bowen, C. V., Bourland, J. F., and Degering, E. F., qualitative test for oxygen in organic compounds, II, 526.
- Bowen, D. M. See Fieser, L. F.
- Bowen, E. J., fluorescence in solution, I, 123. Fluorescence of solids, I, 123.
- and Norton, A., quenching of fluorescence in solution, I, 123.
- and Williams, A. H., photo-oxidation of hydrocarbon solutions, I, 481.
- Bowen, I. S., and Edlén, E., forbidden lines of Fe VII in the spectrum of Nova RR Pictoris (1925), I, 227.
- and Minkowski, R., effect of collisions on intensities of nebular lines, I, 112.

- Bowen, N. L., lavas of the African Rift Valleys and their tectonic setting, I, 226. Geology and chemistry, I, 284. See also Schairer, J. F.
- Bowen, R., karaya gum as cause of urticaria, III, 1090.
- Bowen, S. S. See Cole, H. N.
- Bower, J. O., Burns, J. C., and Mengle, H. A., prontosil and treatment of spreading peritonitis in dogs, III, 177.
- Bowerman, E. P. See Burwell, C. S.
- Bowerman, E. W., and Fernelius, W. C., reactions of zirconium tetrabromide in liquid ammonia, I, 146.
- Bowersox, R. B., efficiency of production of short-range particles from lithium and of 4-4-cm. α -particles from boron under proton bombardment, I, 232.
- Bowes, J. H., and Murray, M. M., mottled teeth from Maldon, Essex, III, 278.
- Bowie, E., atmospheric pollen of Nashville, Tenn., III, 418.
- Bowie, F. J. T., Anderson, T. E., Dawson, A., and Mackey, J. F., M. & B. 693 in gonorrhoea, III, 774.
- Bowley, H. H., and Anderson, R. B., solenoid stirring device for use in confined spaces, I, 494.
- Bowman, D. E., use of reducing factor of pregnancy urine in diagnosis of pregnancy, III, 978.
- Bowman, J. R., micro-viscosimeter, I, 494.
- Bowman, K. M., modern treatment of schizophrenia, III, 832.
- Wortis, H., and Keiser, S., treatment of delirium tremens, III, 863.
- Wortis, J., Fingert, H., and Kagan, G., results with pharmacological shock treatment of schizophrenia, III, 671. See also Goldfarb, W.
- Bowman, R. O. See Murphy, R. C.
- Bowman, W. H. See Ardagh, E. G. R.
- Bowtell, J. N. See Jenkins, H. G.
- Boyce, F. F., hepatic and biliary tract disease, III, 986.
- and McFetridge, E. M., hepatic function and the Quick hippuric acid test. I. Biliary and hepatic disease. II. Thyroid disease. III. Various surgical states, III, 388. Results of exclusion of pancreatic secretion from intestinal tract, with special reference to effects on digestion and liver cell metabolism, III, 690.
- Boyce, R. W. See McDonald, C. H.
- Boycott, M., and Smiles, J. M., diagnosis of hydatidiform mole by biological assay, III, 984. See also Bishop, P. M. F.
- Boyd, Edith, the pineal gland, III, 683.
- Boyd, Edward, and Harkins, W. D., molecular interaction in monolayers; viscosity of two-dimensional liquids and plastic solids. V. Long-chain fatty acids, I, 363.
- Boyd, E. M., effect of benzedrine on ciliary movement, III, 88.
- and Dingwall, M., jun., effect of pituitary (posterior lobe) extract on body-water of fish and reptiles, III, 678.
- Garand, N. D., and Livesey, R. J., effect of posterior pituitary extract on retention of added water in birds and mammals, III, 578.
- and Smith, A. E., effect of light on uptake of water by frogs injected with posterior pituitary extract, III, 48.
- Boyd, E. M., and Whyte, D. W., effect of extract of posterior hypophysis on loss of water by frogs in a dry environment, III, 379. Effect of posterior hypophyseal, extract on retention of water and salt injected into frogs, III, 678.
- Boyd, G. E. See Harkins, W. D.
- Boyd, G. H., and Dunn, M., effects of quinine and plasmoquin administration on parasite reproduction and destruction in avian malaria, III, 929.
- Boyd, G. R., jun. See Yoe, J. H.
- Boyd, J. D., and Jackson, R. L., levels of control in treatment of diabetes mellitus, III, 141. See also Baxter, J. S., and Jackson, R. L.
- Boyd, J. S. K., active immunisation against tetanus, III, 104. Antigenic structure of mannitol-fermenting group of dysentery bacilli, III, 875.
- Boyd, K. See Daum, K.
- Boyd, T. E., Brosnam, J. J., and Maaske, C. A., summation of facilitating and inhibitory effects at the mammalian neuro-muscular junction, III, 368.
- Boyd, W. C., blood groups of American Indians, III, 957.
- and Hooker, S. B., mechanism of specific agglutination, III, 352. Effect of mol. wt. of antigen on the proportion of antibody to antigen in precipitates. II. Statistical examination of available data, III, 435.
- Boyer, E. L., cranio-mandibular musculature of the orang-utan, *Simia satyrus*, III, 541.
- Boyes, W. H. D., Grieve, J. L., and Rule, H. G., derivatives of mesobenzanthrone, II, 26.
- Boyland, E., and Boyland, M. E., chemotherapy of cancer. III. Independence of tissue respiration and glycolysis, and the growth rate of tumours, III, 698.
- Boyland, M. E. See Boyland, E.
- Boyle, P. E., effect of ascorbic acid deficiency on enamel formation in the teeth of guinea-pigs, III, 290.
- Boyle, R. W., and McDonald, C. H., distribution of glycogen in the dog's heart, III, 16.
- Boylston, G. A., McEwen, E. G., and Ivy, A. C., pressor substance is not present in the perfusate of ischaemic kidneys, III, 365.
- Boynton, D., DeVilliers, J., and Reuther, W., are there different critical oxygen concentrations for the different phases of root activity? III, 340.
- Bozarth, A. R. See Booth, H. S.
- Božičević, K. See Prelog, V.
- Bozorth, R. M. See Cioffi, P. P.
- Braak, J. G. ter. See De Langen, C. D.
- Braam Houckgeest, J. P. W. A. van, dissociating powers of chlorinated hydrocarbons, I, 24.
- Braasch, W. F. See Griffin, M.
- Braccasi, M. A., antiseptic power of methyl *p*-hydroxybenzoate, III, 1000. Dissociation of *B. anthracis*, III, 1011.
- Bracci, U., allergy to catgut, III, 191.
- Bracewell, K. H., effective cross-section of positive alkali ions with respect to gas molecules, I, 3.
- Brachet, J., effect of iodoacetic acid and of fluoride on development and metabolism of eggs of amphibia, III, 146. Carbohydrate metabolism and morphogenesis in the amphibians, III, 501. Oxygen consumption of artificially activated and fertilised *Chaetopterus* eggs, III, 683.
- Brack, C. B., and Langworthy, O. R., effect of oestrogenic hormone on vesical muscle, III, 981. See also Gray, L. A.
- Bracken, H. von, perceptual illusions and apparent size of after-images in twins, III, 753. and Schaefer, Hans, seasonal changes in frog's nerve activity, III, 465.
- Bracken, M. M. See MacLachlan, W. W. G.
- Bradbury, J. T., and Gaensbauer, F., masculinisation of female rat by gonadotropic extracts, III, 1054. See also Gaensbauer, F.
- Bradbury, N. B., and Bloch, F., deuteron source for nuclear research, I, 340.
- Braddick, H. J. J., cosmic-ray bursts at high altitudes, I, 445.
- Bradfield, D., and Smith, M. C., ability of the dog to utilise vitamin-A from plant and animal sources, III, 285.
- Bradford, F. K., ablations of frontal cortex in cats with special reference to enhancement of scratch reflex, III, 1036.
- Bradley, A. J., crystal structure of Co_2Al_2 , I, 12. Structure of meteorites, I, 342. and Goldschmidt, H. J., X-ray study of slowly cooled iron-copper-aluminium alloys. I. Alloys rich in iron and copper. II. Alloys rich in aluminium, I, 314, 465. X-Ray investigation of the iron-rich nickel-iron alloys, I, 517.
- Goldschmidt, H. J., and Lipson, H., intermediate phases in the aluminium-copper system after slow cooling, I, 313. and Seager, G. C., X-ray investigation of cobalt-aluminium alloys, I, 313.
- Bradley, C. See Jasper, H. H.
- Bradley, H., feet of industrial worker; shoe efficiency, III, 619.
- Bradley, H. C. See Eder, H.
- Bradley, R. S., surface energy of mixtures of finely divided carbon and paraffin, I, 368.
- Bradley, W. B., Eppson, H. F., and Beath, O. A., nitrate as cause of oat hay poisoning, III, 1004.
- Bradley, W. H. See Eagles, G. H.
- Bradley, W. R., and First, M. W., physiological response of pleural surfaces to implanted dusts, III, 95. See also McCord, C. P.
- Bradshaw, D. B., new serum for scarlet fever, III, 1102.
- Bradsher, C. K., and Rosher, R., synthesis of phenanthrene derivatives. II. 9:10-Disubstituted hydrocarbons, II, 362. and Schneider, A. K., synthesis of phenanthrene derivatives. I. 9-Phenyl- and 9-*p*-tolyl-phenanthrene, II, 55. and Tess, R. W. H., synthesis of phenanthrene derivatives. III. 9-Methyl-phenanthrene, II, 499. See also Fieser, L. F., and Fuson, R. C.
- Bradstreet, R. B., catalyst for the determination of nitrogen by the Kjeldahl method, I, 96.
- Bradt, W. E., and Erickson, A. W., electrochemical reduction in acid solution of *p*-nitrophenetole, II, 210.
- Brady, J. J., and Moore, W. H., actino-electric effects in tartaric acid crystals, I, 181.
- Brändli, S., haemolytic jaundice and gastric disturbances, III, 352.
- Braestrup, P. W., content of reduced ascorbic acid in blood-plasma in infants, especially at birth and in the first days of life, III, 167.

- Bragagnolo, G., mineral springs of Boario (Brescia), I, 627.
- Brager, A., X-ray examination of structure of boron nitride, I, 600. X-Ray examination of titanium nitride. II. Structure of some intermediate products formed when obtaining titanium nitride, I, 600.
- Bragg, L. B., laboratory columns for close fractionation; conical type of Stedman packing, I, 433.
- Bragg, (Sir) W. H., liquid films, I, 468.
- Bragg, W. L., Patterson diagrams in crystal analysis, I, 184. Discussion on plastic flow in metals, I, 187. New type of "X-ray microscope," I, 389. Magnets, I, 459.
- Brahic, J., and Veyron, J., tuberculin skin-reaction and the intradermal histamine reaction in non-tuberculous man, III, 936.
- Braid, F., osseous dystrophy following icterus gravis neonatorum, III, 1021.
- Braier, B., and Chouela, A., colorimetric determination of blood-cholesterol, III, 894. Determination of blood-cholesterol, III, 894.
- Brailovski, V. P. See Borisov, M. D.
- Brain, F. H., and Gibson, C. S., organic compounds of gold. VII. Methyl and ethyl compounds, II, 304.
- Brain, W. R., sleep, normal and pathological, III, 1036.
- Braine, G. I. H. See Batchelor, R. C. L.
- Braithwaite, D. See Evans, W. V.
- Brambilla, M., intermolecular oxidation of oleic acid, II, 47. Intermolecular oxidation of linoleic acid, II, 493.
- Bramley, A., hard component of cosmic radiation, I, 296.
- and Brewer, A. K., thermal method for the separation of isotopes, I, 483. Thermal method for the separation of gases and isotopes, I, 627.
- Branch, C. F. See Morton, A. V., and Wesselhoeft, C.
- Branch, G. E. K. See Stross, F. H.
- Brand, E. See Brodie, B. B.
- Brand, J. O. See Angerer, E. von.
- Brand, K., and Kruke-Amelung, D., reduction of organic halogen compounds and compounds of the tetra-aryl-butane series. XII. Cathodic reduction of $\beta\beta\beta$ -trichloro- $\alpha\alpha$ -di-*p*-bromophenyl-ethane. XIII. $\alpha\alpha\delta\delta$ -Tetra-*p*-bromophenyl- $\Delta\alpha\beta\gamma$ -butatriene, II, 306, 307.
- Brandenburg, C. See Baumgarten, P.
- Brandenburg, W., glycogen in the rat's ovary, III, 55.
- Brandenburger, H. See Naegeli, C.
- Brandes, E. See Ackermann, D.
- Brandes, effect of ultra-violet rays on blastula and gastrula of *Discoglossus pictus*, III, 739.
- Brandly, C. A., and Dunlap, G. L., outbreak of pox in turkeys; diagnosis and immunisation, III, 633.
- See also Levine, N. D.
- Brandner, J. D. See Ewing, W. W.
- Brandon, A., contracture and action of physostigmine in frog muscle, III, 243.
- Brandrup, W., occurrence and detection of peroxidases in fresh plant preparations, III, 517, 803.
- Brandstater, P., relation between electric and acoustic phenomena in muscle, III, 464.
- Brandt, A. E., tests of significance in "reversal" or "switchback" [biological] trials, III, 220.
- Brandt, C. W., and Neubauer, L. G., miro resin. I. Ferruginol, II, 382.
- Brandt, H., and Schussel, W., vitamin-C in athletic exercise, III, 604.
- Brandt, M. See Wikoff, H. L.
- Brandt, W., action of nicotine on the organism, III, 91. Culturo media [for bacteria] with soya-bean and sweet lupin flour, III, 209.
- Branham, J. R., and Sperling, E. O., bubbler tip of pyrex glass for difficult absorptions, I, 493.
- Branham, S. E., Pittman, M., Rake, G., and Scherp, H. W., proposed mouse protection unit for antimeningococcus serum, III, 331.
- Branion, H. D. See LeMasurier, H. E.
- Brankel, O., severe disturbances of the mucous membrane of the upper respiratory tract after administration of uleron, III, 178.
- Branzeu, P. See Fontaine, R.
- Brase, K. D., synthetic growth-substances in the rooting of soft-wood cuttings of deciduous fruits, III, 802.
- Brass, K., and Clar, E., perylene trihalides, II, 207.
- Brasseur, H., and De Rassenfosse, A., structure of the SnCl_4 group, I, 244.
- and Pauling, L., crystal structure of ammonium cadmium chloride, NH_4CdCl_2 , I, 64.
- Bratt, J. F., red cell count and haemoglobin in human blood at latitude N. 70°, III, 349.
- Bratton, A. C., mechanical thermoregulator, I, 490.
- and McClendon, J. F. [with Foster, W., and White, R.], determination of iodine in drinking water, urine, and substances containing only about 1000 times as much organic matter as iodine, I, 38.
- and Marshall, E. K., jun., new coupling component for sulphanilamide determination, III, 773.
- See also Marshall, E. K., jun.
- Brattstrom, E., case of diabetes insipidus traumaticus and pregnancy, III, 678.
- Brauch, F., blood-sugar and movements of the stomach and gastric pain, III, 386. Effects of partial gastrectomy, III, 483.
- and Schultz, H., effect of exercise on circulation in diabetics, III, 746.
- Braude, J. See Centnerszwer, M.
- Braüniger, H. See Reingold, H.
- Brauer, A., modifications of development in relation to differential susceptibility of the Bruchid (Coleoptera) egg to potassium cyanide during different metabolic phases, III, 347.
- Brauer, G., crystal structure of inter-metallic compounds of aluminium with titanium, zirconium, thorium, niobium, and tantalum, I, 18. Crystal structure of TiAl , NbAl , TaAl , and ZrAl , I, 457.
- Brauer, R., gingivitis during pregnancy [from avitaminosis-C], III, 496.
- Braun, A. D., mitogenetic secondary radiations in unimolecular films, III, 194.
- Braun, C. E., Erit, J. D., and Crooks, G. C., guanidine structure and hypoglycaemia; carbocyclic diguanidines, II, 16.
- Braun, G. L. See Hellebrandt, F. A.
- Braun, H., sulphur, iron, and magnesium requirements of moderate strains of *B. diphtheriae*, III, 203.
- Braun, P. See Rheinholdt, H.
- Braun, R., lens changes in diabetes, III, 574.
- Braun, S. See Gelman, I.
- Braun, W., treatment of non-specific vaginal discharge by alkalis, III, 611.
- Braun-Menendez, E., Chute, A. L., and Gregory, R. A., usage of pyruvate by dog's heart, III, 896.
- See also Orias, O.
- Braunbek, W., free suspension of a diamagnetic body in a magnetic field, I, 459. Freely suspended bodies in electric and magnetic fields, I, 459.
- Brauns, F. E. See Ahlm, C. E.
- Braunstein, A. E., enzyme system of transamination, its mode of action and biological significance, III, 721.
- Braunstein, A. L. See Townsend, S. R.
- Bravina, S. S. See Joffe, J. S.
- Bray, G. R. R., binocular illusion, III, 133.
- Bray, J. M., ilmenite-haematite-magnetite relations in some emery ores, I, 435.
- Bray, W. E. See Waddell, W. W., jun.
- Braz, G. I., and Tuturin, I. V., dichloro-substituted phenylarsinic acids and their derivatives, II, 565.
- See also Scherlin, S. M.
- Braz, M., and Allen, L. A., protein metabolism and acid production by lactic acid bacteria in milk; influence of yeast extract and chalk, III, 524.
- Brdicka, R., polarographic examination of serum changes in cancer, III, 598.
- Breazeale, E. L., and Greene, R. A., stability of Kline antigen emulsions, III, 338.
- Brebion, G., and Magne, H., variations of dead space and total volume of respiratory apparatus, III, 365.
- Brechstedt, A. J. See Plaksin, I. N.
- Breckenridge, J. G., Lewis, R. W. J., and Quick, L. A., 2,2'-diquinoly; a reagent for copper, I, 625.
- Breckpot, R., spectrographic determination of certain minor elements in sugar beet, III, 1019.
- Bredereck, H., Caro, G., and Richter, F., nucleic acids. X. Enzymic fission of yeast- and thymo-nucleic acid, III, 98.
- and Kothnig, M., nucleic acids. XIII. Constitution of polynucleotides; basicity of thymonucleic acid, II, 102.
- Kothnig, M., and Lehmann, Gerhard, nucleic acids. XI. Constitution of polynucleotides; deamination of yeast- and thymo-nucleic acid, III, 326.
- Lehmann, Gerhard, Schonfeld, C., and Fritzsche, E., beryllium chloride in organic reactions, II, 411.
- and Muller, Gerhard, nucleic acids. XII. Thymic acid. XIV. Enzymic fission of yeast- and thymo-nucleic acid, II, 102; III, 871.
- Breidis, C., and Furth, J., feasibility of preserving neoplastic cells in the frozen state, III, 282.
- Breger, A. C., X-ray investigation of titanium nitride. I. Structure of single crystals, I, 553. X-Ray investigation of structure of boron nitride, I, 553.
- Breh, F., use of air-cooled condensers in blood-cholesterol determinations, III, 554.
- Breiphol, W., movements of the Fallopian tubes in various phases of the menstrual cycle and pregnancy, III, 912.

- Breit, G., Hoisington, L. E., Share, S. S., and Thaxton, H. M., approximate equality of the proton-proton and proton-neutron interactions for the meson potential, I, 395.
- and Knipp, J. K., K-electron capture in ^7Be , I, 4.
- Thaxton, H. M., and Eisenbud, L., analysis of experiments, I, 395.
- See also Hoisington, L. E.
- Breitenbach, J. W., polymerisation, I, 375.
- Breitenacker, L., determination of carbon monoxide hemoglobin, III, 650.
- Breitweiser, K., use of *Equisetum* as a diuretic, III, 507.
- See also Jaretsky, R., and Schmitt, L.
- Bremer, F., oscillograph analysis of sensory responses in the cortical acoustic area in the cat, III, 572.
- and Dow, R. S., cerebral acoustic area of cat, III, 1037.
- See also Bacq, Z. M., and Bonnet, V.
- Bremer, G., teeth of man, ape, dog, and pig, III, 597.
- Bremer, O., pyridino-3:4-triazole series, III, II, 453.
- Bremner, R. W., Thompson, T. G., and Utterback, C. L., sp. gr. of pure and mixed salt solutions in the temperature range 0° to 25° , I, 15. Electrical conductances of pure and mixed salt solutions in the temperature range 0° to 25° , I, 373.
- Brenchley, W. E., comparative effects of cobalt, nickel, and copper on plant growth, III, 635.
- Brendlein, H., automatic high-pressure regulator, I, 223.
- See also Fuchs, O.
- Breneman, W. R., variations in reactions of chicks to different methods of administering androgens, III, 267. Augmentation of pituitary gonadotropic hormone by chlorophyll, plant-growth hormones, and hamin, III, 576.
- Brenner, F., free muscular cords in the atria of the heart, III, 122.
- Brenner, H., relation between activity of muscle and striation, III, 957.
- Brennert, S., nature of the cathode in the rusting of iron, I, 572.
- Brentano, C., action of insulin on glycogen formation from glucose in the normal animal, III, 477. Action of glucose and insulin on glycogen breakdown in starvation and phloridzin poisoning, III, 500.
- Brentano, J. C. M., Honeyburne, (Miss) J., and Berry, J. K., measurements of the intensity distribution of the white X-radiation reflected from a crystal: dispersion of the atomic scattering factor of zinc near the K absorption edge, I, 456.
- Brescia, F., calculation of the dissociation constant of weak acids in water-deuterium oxide mixtures, I, 25. Prediction of rate constants from equilibrium data for reactions in D_2O - H_2O mixtures, I, 376.
- Brescia, M. A., tics in childhood, III, 130.
- See also Dobbins, J. M.
- Breslow, D. S. See Hauser, C. R.
- Bresquer, R., Rivin, M., and Sokolik, A., explosive limits of gaseous mixtures. IV. Acetylenic mixtures, I, 30.
- Bresse, B. B., jun., and McCoord, A. B., vitamin-A absorption in coeliac disease, III, 1068.
- Breton, See Lespagnol.
- Breton, A., Rigaud, and Christiaens, L., flocculation of senile blood with distilled water, III, 351.
- See also Gernez, C.
- Breton, (Mlle.) J. See Boutaric, A.
- Breton, (Mlle.) M. See under Roy, (Mme.) M.
- Bretscher, E., and Cook, L. G., transmutations of uranium and thorium nuclei by neutrons, I, 296.
- See also Feather, N.
- Bretschneider, H. See Galinovski, F.
- Breu, W., electrocardiogram in coronary thrombosis after exercise, III, 745.
- Breuer, R., and Militzer, W. E., micro-determination of iron in blood, III, 121.
- Breusch, F. L., sterol metabolism in tumour-mice, III, 1064.
- Brewer, A. C. See Corry, D. C.
- Brewer, A. K., constancy of ^{40}K , I, 292. Isotopes of potassium in phosphate rocks and salts, I, 438.
- See also Bramley, A.
- Brewer, C. R., and Werkman, C. H., anaerobic dissimilation of citric acid by *Aerobacter indologenes*, III, 943.
- Brewer, H. F. See Howkins, J.
- Brewer, J. H., antibacterial effects of organic mercurial compounds, III, 865. Modification of Brown anaerobe jar, III, 948.
- and Cook, E. B. M., permanent nephelometer from pyrex glass, III, 1113.
- Brewer, J. I., rhythmic changes in skin capillaries and their relation to menstruation, III, 363.
- Brewster, P. M., and Jenkins, G. L., titration curve of methionine acid, I, 321.
- Brewster, R. Q., and Choguil, H. S., iododerivatives of diphenyl ether. II. Orientation, II, 544.
- and Foje, J. A., reduction of diazonium salts to hydrocarbons with alkaline formaldehyde, II, 497.
- Breyer, B., effect of substituents [in the benzene ring] on the chemical, physico-chemical, and biological properties of chemical compounds; relationship between chemical constitution and biological action, I, 374. Effect of the sulphonamide group on the chemical and physico-chemical properties of a substance, in relation to its chemotherapeutic action, III, 178. Polarography of the relationships between pharmaceutical substances and constituents of serum, III, 304. Polarography of the partition coefficient between aqueous and lipid solvents, III, 304.
- Bricard, J., and Jung, J., intensity of penetrating terrestrial radiation in Auvergne, I, 593.
- Bricka, M. See Schwartz, A.
- Bricker, E. M., and Graham, E. A., inhibitory effect of sulphanilamide on wound healing, III, 859.
- Brickman, L., Pyle, J. J., and Hibbert, H., aldehydic constituents from ethanolysis of spruce and maple woods, II, 172.
- Pyle, J. J., McCarthy, P. L., and Hibbert, H., lignin and related compounds. XXXIX. Ethanolysis of spruce and maple woods, II, 273.
- See also Pyle, J. J.
- Brickner, R. M. See Laidlaw, R. W.
- Brickwedde, F. G. See Hoge, H. J.
- Bridge, E. M., and Winter, E. A., diabetes, insulin action, and the respiratory quotient, III, 708.
- Bridge, J. C., medical supervision of industry by the State, III, 619.
- Bridgers, W. H., cerebral vascular disease accompanying sickle-cell anaemia, III, 811.
- Bridgman, P. W., high-pressure behaviour of miscellaneous minerals, I, 110.
- Bridré, J., and Krassnoff, D., approximate dimensions of filterable forms of the organisms of contagious agalactia, III, 1014.
- Brief, B. J. See Sutton, T. S.
- Brieger, H. See Bischoff, H.
- Brienne, J. G. See Nijveld, W. J.
- Briese, E., effect on the blood cells of the foetal rat of inhalation of carbon tetrachloride by the mother during gestation, III, 7.
- and Higgins, G. M., effect of feeding ventriculin to pregnant rats, with special reference to size of the blood cells of the young, III, 547.
- Briese, R. R., and Couch, J. F., preservation of cyanogenetic plants for analysis, III, 215.
- See also Couch, J. F., and Martin, John H.
- Briest, K., gold treatment of tuberculosis and chronic rheumatism, III, 779.
- Brigando, (Mlle.) J., hydroferri-cyanic, hydrocobaltic-cyanic, and hydrochromic-cyanic acids, I, 144.
- Briggs, A. H., familial primary glaucoma in adults, III, 1041.
- Briggs, G., Choyce, D. P., Hill, J., and Kerridge, P. M. T., acuity of hearing of left- and right-handed children, III, 904.
- Briggs, H. B. See Ives, H. E.
- Briggs, L. H., and Thomas, B. W., oxidation of stearic acid by oxygen, I, 619.
- Briggs, R. W., changes in density of the *Rana pipiens* embryo during development, III, 643.
- Bright, R. D., and Hauser, C. R., influence of substituents on the rates of decomposition of the potassium salts of dihydroxamic acids; Lossen rearrangement, II, 213.
- Bright, W. C. See Whitaker, M. D.
- Brigl, P., Gronemeier, K., and Schulz, A., carbohydrates. XXI. Ethylthiogluco-sides and 5:6-isopropylidene-glucose, II, 299.
- and Herrmann, R., octa- and deca-hydronaphthalene-9:10-dicarboxylic acid, II, 21.
- Brill, N. Q. See Davison, C.
- Brill, R., Grimm, H. G., Hermann, C., and Peters, C., application of Röntgen-ray Fourier analysis to questions of chemical linkage, I, 243.
- Brillanti, F., and Benfenati, A., distribution of sebaceous glands in human skin, III, 155.
- Brillouin, L., necessity for distinguishing between two definitions of surface tension, I, 63. Thermal dependence of elasticity in solids, I, 65.
- Brindley, G. W., widths of X-ray reflexions at 86° and 293°K , I, 243.
- and Atkinson, G. H., effect of temperature on intensity of X-ray reflexions from copper, I, 599.
- and Ridley, P., X-ray investigation of atomic vibrations in cadmium, I, 184. Characteristic temperature of magnesium oxide, I, 184. X-Ray study of lattice distortion in copper, nickel, and rhodium, I, 305.

- Briner, E., formation and decomposition of ozonides considered from point of view of energy, I, 420.
- Desbaillets, J., and Jacob, J. P., chemical action of electrical discharges. XVII. Production of acetylene by the electric arc, at various frequencies, in mixtures of methane, and hydrogen, I, 88.
- and Franck, D., ozonisation of acrylic and crotonic acid and of their ethyl esters, II, 241.
- Franck, D., and Perrottet, E., Raman spectra and constitution of ozonides; Raman spectra of methyl citraconate and mesaconate and their ozonides, I, 180.
- and Perrottet, E., solubility of ozone in water and in aqueous sodium chloride; calculation of the solubility of atmospheric ozone in water, I, 252. Solubility and heat of solution of ozone in carbon tetrachloride, I, 365.
- Ryffel, K., and Perrottet, E., ozonisation of allyl-, propenyl-, and α -methyl-vinyl-benzene; results of physico-chemical determinations (Raman spectra, ultra-violet absorption spectra, dielectric constants, and dipole moments), I, 401.
- Siegrist, B., and Paillard, H., increase of yield in formation of nitric oxide in the gas phase in the electric arc at high frequencies and under reduced pressure, I, 208.
- See also Suzs, B.
- Brink, R. A. See Smith, W. K.
- Brinkhous, K. M., Smith, H. P., and Warner, E. D., prothrombin deficiency and the bleeding tendency in obstructive jaundice and in biliary fistula, III, 9.
- Smith, H. P., Warner, E. D., and Seegers, W. H., inhibition of blood clotting: unidentified substance which acts with heparin to prevent conversion of prothrombin into thrombin, III, 815.
- See also Scanlon, G. H., Seegers, W. H., and Warner, E. D.
- Brinkley, S. R., jun., composition of a hydrated double salt of nickel and potassium oxalates, I, 334.
- Brinkman, H., Wilson cloud chamber with several expansions per second, I, 433.
- Ornstein, L. S., and Langendijk, W., photographic sensitometry for β -ray spectra, I, 170.
- Brinkmann, C., lowering of breakdown potential for air at atmospheric pressure, I, 229.
- Brinton, H. P., disabling sickness and non-industrial injuries among drivers and other employees of certain bus and cab companies, 1930-34 inclusive, III, 619.
- Brintzinger, H., and Plessing, H., binuclear ethylenediaminecobaltic complexes, I, 611.
- Plessing, H., and Rudolph, W., formate-complexes, I, 611.
- and Rost, B., capacity of fritted filters to withstand chemical attack in analytical work with alkaline liquids, I, 161.
- Brisbin, G. W. F., and Allen, F., elastic extensibility of muscle, III, 825.
- Briscoe, C. F., and Andrews, W. B., effect of strains of nodule bacteria and lime on response of soya beans to artificial inoculation, III, 438.
- Briscoe, G., quinine antagonism to prostigmine [on skeletal muscle], III, 663.
- Briscoe, H. V. A. See Roberts, E. R.
- Briskas, S. See Polonovski, M.
- Brissot, M. See Marchand, L.
- Bristol, L. D., air conditioning and industrial health, III, 94.
- Bristow, J. R., conductivity of thin films of thallium on a pyrex glass surface, I, 246.
- See also Appleyard, E. T. S.
- Britton, S. W., and Kline, R. F., emotional hyperglycemia and hyperthermia in tropical mammals and reptiles, III, 818.
- Silvette, H., and Kline, R. F., adrenal insufficiency in American monkeys, III, 261. Blood-chemical and other conditions in normal and adrenalectomised sloths, III, 261.
- See also Corey, E. L., and Silvette, H.
- Brusova, L. J., intramolecular rearrangements occurring during the dehydration of ditertiary dicyclic glycols of the camphene series. I, II, 555.
- Broad, R. J. B. See Organe, G.
- Broadhurst, J., and Paley, C., single-dip stain for direct examination of milk, III, 948.
- Broadway, L. F., and Pearce, A. F., emission of negative ions from oxide cathodes, I, 230.
- Broager, B. See Bing, J.
- Brocard, H. See Laporte, A.
- Brochemin, R. See Azerad, E.
- Brock, J., Anzlinger, A., and Stamer, E., haemoglobin concentration and pallor, III, 8.
- Brock, J. F., intestinal stricture and megalocytic anemia, III, 227.
- Brock, N., Arndt-Schulz law, III, 184.
- Druckrey, H., and Hamperl, H., mechanism of cancer-producing substances, III, 159. Action of carcinogenic substances, III, 491.
- Druckrey, H., and Herken, H., glycolysis, III, 300. Tissue metabolism during physiological stimulation and injury, III, 854.
- See also Druckrey, H.
- Brocklesby, H. N. See Large, R. G.
- Brockman, C. J., qualitative analysis without hydrogen sulphide, I, 430.
- Brockmann, F. W. See Wibaut, J. P.
- Brockmann, A. W., development of shape of the body of the human and pig embryo, III, 224.
- Brockmann, H., and Busse, A., constitution of antirachitic vitamin of tunny liver, III, 292.
- Haschad, M. N., Maier, K., and Pohl, F., hypericin, the photodynamically active pigment of *Hypericum perforatum*, II, 483.
- and Maier, K., rottlerin, II, 334.
- and Müller, K., synthesis of alkannan and other alkylnaphthazarins, II, 433.
- Brockmeier, J. See Heubner, W.
- Brockway, L. O., Ewens, R. V. G., and Lister, M. W., electron-diffraction investigation of chromium, molybdenum, and tungsten hexacarbonyls, I, 13.
- and Robertson, J. M., crystal structure of hexamethylbenzene and length of the methyl group bond to aromatic carbon atoms, I, 512.
- Brocq-Rousseau, D., Boutaric, A., and Roy, (Mme.) M., relationship between optical activity and viscosity of sera from successive bleedings of same horse, III, 813. Flocculation in weakly buffered solution of sera from successive bleedings of the same horse, III, 816.
- Brod, J. See Popper, H.
- Brod, J. S., France, W. G., and Evans, W. L., thermal polymerisation of ethyl elcaostearate and ethyl $\theta\kappa$ - and $\theta\Delta$ -linoleate, II, 98.
- Brode, R. B., and Starr, (Miss) M. A., cosmic-ray showers from lead plates, I, 5.
- Brode, W. R., structure and absorption spectra of azo-dyes, II, 415.
- and Silverthorn, R. W., influence of impurities on line strength in quantitative analysis, I, 485.
- See also Matthews, N. L.
- Brodie, B. See Renshaw, R. R.
- Brodie, B. B., Brand, E., and Leshin, S., use of bromide in determination of extracellular fluid, III, 1061.
- See also Wallace, G. B.
- Brodie, S. S., carbon and hydrogen determinations; effect of pressure on lessening combustion and sweeping-out times, II, 526.
- Brodovitsch, L. A., Ofitzerov, V. N., and Uspenskaja, S. I., blood-sugar curves in measles, diphtheria, and scarlet fever, III, 233.
- Brodski, A. E., Sack, A. M., and Kortschagin, L. V., Raman spectra of liquid solutions, I, 241.
- See also Skarre, O. K.
- Brodski, A. I., and Skarre, O. K., concentration of heavy isotope of oxygen by distillation of water, and isotopic analysis of water, I, 575.
- Brodski, D. A., mechanism of the Perkin reaction. III. Formation of cinnamic acid, II, 262.
- Brody, M. W. See Hayman, M.
- Brody, S., factors influencing apparent energetic efficiency of productive processes in farm animals, III, 1075.
- [with Sandberg, C., and Asdell, S. A.], growth and development. XLIX. Growth, milk production, energy metabolism, and energy efficiency of milk production in goats, III, 488.
- and Campbell, J., growth and development. XLVIII. Relation between body-weight, amount of wool or feathers, and temperature regulation, III, 488.
- See also Washburn, L. E.
- Bröchner-Mortensen, K., uric acid in blood and urine in Bright's disease, III, 276.
- Hypoproteinemia in chronic pemphigus, III, 356. Variations in uric acid clearance after administration of purine, III, 760. Diagnosis of gout, III, 771.
- Broeck, C. T., and Nelson, J. B., a highly fatal disease of guinea-pigs, III, 432.
- Brömel, H. See Negelein, E.
- Brens, J., blind spot of Mariotte; its ordinary imperceptibility or filling-in and its facultative visibility, III, 838.
- Brönsted, J. N., and Volqvartz, K., solubility and swelling of high polymerides, I, 319.
- Brogssitter, A. M., gold treatment of pulmonary tuberculosis, III, 779.
- Brohut, S., and Claesson, S., dissociation of the haemocyanin molecule, II, 526.
- See also Svedberg, T.

- Broman, I., development of organ of smell in *Dipnoi*, III, 346.
- Broman, T., dyes as test for the blood-cerebrospinal fluid barrier, III, 31.
- Bromberg, A. V. See Lepin, L. K.
- Bromberg, W., marihuana: a psychiatric study, III, 1090.
- Bromer, R. S. See Ash, R.
- Bronchi, V., serological relations between the lecithinase A of pancreas and that of animal poisons, III, 323.
- Bronder, O. See Matossi, F.
- Brons, F., and Gorter, C., paramagnetic absorption in iron ammonium alum in a constant parallel field, I, 66.
- Bronssy, J. See Hédou, L.
- Bronstein, I. P., gynaecomastia, III, 588. Hypergenitalism in children, III, 684.
- Brookes, M. H. See Roberts, L. J.
- Brookman, E. F. See Norrish, R. G. W.
- Brooks, C., apparatus for extraction of internal atmospheres from fruits and vegetables, III, 802.
- Brooks, D. B., properties of purified normal heptane and isooctane ($\beta\beta\delta$ -trimethylpentane), I, 189.
- Brooks, G., relation between fluorescence and chemical constitution in laccol, moreacol, and their derivatives, I, 9. Chemical and spectrographic study of snake venom, III, 1089.
- and Paulais, R., distribution and localisation of carotenoids, flavins, and L-ascorbic acid in lamellibranch molluscs: common oysters and green and white Portuguese oysters (*Gryphaea angulata*), III, 597.
- See also Bertrand, G.
- Brooks, J., and Pace, J., distribution of carbon dioxide in the hen's egg, III, 61.
- Brooks, M. M., haemoglobin-methaemoglobin and potassium cyanide, III, 813.
- Brooks, R. J., gas generators, I, 223.
- Brooks, W. D. W., effect of breathing exercises on total pulmonary capacity and subdivisions in case of asthma, III, 563.
- Broom, J. C., and Brown, H. C., electric charge of trypanosomes in the salivary glands of tsetse flies, III, 427.
- See also Brown, H. C., and Hoare, C. A.
- Brosius, W. L. See Birkelo, C. C.
- Brosnam, J. J. See Boyd, T. E.
- Brosse, R., resorption of fatty body reserves in *Bibio marci*, L., III, 997.
- Broström, K. J. See Bjerger, T.
- Brothner, R. J., hypertension from obstruction of the aorta, III, 896.
- Brough, P., avoidance of crystal formation during embedding of plant material in paraffin wax, III, 1113.
- Broughton, G., and Lee, Y. N., adsorption of acids by synthetic resins, I, 414.
- See also Lewis, W. K.
- Broughton, W. A. See Twenhofel, W. H.
- Brouha, L., Cannon, W. B., and Dill, D. B., blood-sugar variations in normal and in sympathectomised dogs, III, 653.
- and Nowak, S. J. G., role of vagus in cardio-accelerator action of atropine in sympathectomised dogs, III, 657.
- Nowak, S. J. G., and Dill, D. B., role of vagus in cardio-accelerator action of muscular exercise and emotion in sympathectomised dogs, III, 657.
- See also Bacq, Z. M., and Edwards, H. T.
- Brown, G. O. See Casey, A. E.
- Brouwer, E., and Dijkstra, N. D., alimentary acetoneuria and ketonuria in dairy cattle induced by feeding grass silage of the butyric acid type, III, 283.
- Brouwer, H. A., leucite rocks of the active volcano Batoe Tara (Malay archipelago), I, 164.
- Brovko, J. F. See Michnevitch, G. L.
- Browman, L. G., reproductive performance of albino rats with previous vitamin-A depletion histories, III, 765.
- Brown, A., two new filters, using the Seitz E. K. sterilising pads, III, 816.
- and Sechzer, P. H., sensitivity to rabbit serum, III, 191.
- See also Ehrenfeld, I.
- Brown, Alan. See Tisdall, F. F.
- Brown, Alex E., Herrell, W. E., and Barger, J. A., neoprontosil (oral) in treatment of chronic ulcerative colitis, III, 302.
- See also Bannick, E. G., and Herrell, W. E.
- Brown, Alice E. See Brown, O. W.
- Brown, A. S. See MacInnes, D. A.
- Brown, G. F. G., and Dolkart, R. E., therapy of peptic ulcer, III, 1058.
- See also Dolkart, R. E.
- Brown, D. B., urea-clearance test in pregnancy, III, 391.
- Brown, D. J. See Durban, S. A.
- Brown, D. K., chemotherapy of gonococcal vulvovaginitis, III, 503.
- Brown, D. R. See Anderson, T.
- Brown, D. S., Robinson, R. R., and Browning, C. M., determination of small amounts of potassium; simpler and more rapid variation of the sodium cobalt-nitrite method, I, 98.
- Brown, E. A. See Campbell, A. N.
- Brown, E. C., and Nagle, N., Kahn reactions of 64 tularemia patients, III, 207. Time interval in reading Kahn test, III, 1106.
- Brown, E. F. See Hodge, H. C.
- Brown, E. W. See Guest, G. M.
- Brown, F. A., internal secretion affecting viability in crustacea, III, 255.
- Brown, F. B. See Crist, R. H.
- Brown, F. E. See King, W. B.
- Brown, G. L., and Harvey, A. M., reactions of avian muscle to acetylcholine and eserine, III, 27. Congenital myotonia in goat, III, 748.
- and MacIntosh, F. C., discharges in nerve fibres produced by potassium ions, III, 748.
- Brown, G. M., McLean, F. J., and Macgraith, B. G., pressor response of hypertensive rabbits to tyramine and posterior pituitary extract, III, 897.
- Brown, G. T., aminophyllin in asthma, III, 191.
- Brown, Harrison, and Inglis, D. R., coulomb energies and nuclear models, I, 447.
- Brown, Herman, micro-methods for quantitative analysis of urinary calculi, III, 761.
- See also Kolmer, J. A.
- Brown, H. C., and Broom, J. C., agglutination test for Weil's disease, III, 798.
- See also Broom, J. C.
- Brown, Herbert C., correlation between the electronegativity series of organic radicals and bond moments, I, 455.
- Schlesinger, H. I., and Burg, A. B., boron hydrides. XI. Reaction of diborane with organic compounds containing a carbonyl group, II, 205.
- See also Kharasch, M. S.
- Brown, H. R., Neufeld reaction (Quelling test) following desiccation of pneumococcus preparations, III, 204.
- Brown, H. R., jun., and Clark, W. F., plasma sp. gr. and control of fluid administration in artificial fever, III, 961.
- Brown, H. W., ineffectiveness of sulphanilamide in treatment of canine filariasis, III, 304.
- See also White, J. W.
- Brown, J. B., Wright, H. D., and Limbacher, H. P., chemistry of mixed human saliva, III, 61.
- See also Shinowara, G. Y.
- Brown, J. Howard, simplified method for grouping haemolytic streptococci by the precipitin reaction, III, 206.
- Brown, J. W., and Finland, M., specific treatment of pneumococcus type II pneumonia, III, 775.
- See also Finland, M.
- Brown, N. A., and Gardner, F. E., indolyl-acetic acid galls of a secondary type, III, 214.
- Brown, O. W., Borland, J. E., Johnston, R. A., and Grills, R. C., catalytic activity of intermetallic compounds in the gas-phase reduction of nitrobenzene, I, 424.
- and Brown, Alice E., electrolytic preparation of 2:4-dinitrobenzoic acid from 2:4-dinitrotoluene, II, 213.
- Brown, P. W. See Logan, A. H.
- Brown, R. A. See Thayer, S. A.
- Brown, W. E. L., micro-apparatus for temperature-time curves, and a high-temperature thermostat, I, 433.
- Brown, W. F., jun., reversible magnetisation in ferromagnetics, I, 308.
- Brown, W. G., micro-separations by chromatographic adsorption on blotting paper, I, 282.
- Kharasch, M. S., and Sprowls, W. R., exchange reactions in deuterolcohol. II, I, 530.
- Widiger, A. H., and Letang, N. J., steric nature of the ortho effect in the hydrogen exchange reactions of aromatic tertiary amines, I, 617.
- See also Widiger, A. H.
- Brown, W. Hurst, use of sulphanilamide in clinical medicine, III, 177.
- Brown, W. R., Hansen, A. E., Burr, G. O., and McQuarrie, I., effects of prolonged use of extremely low-fat diet on an adult human subject, III, 397.
- Browne, A. W. See Specht, H. E. M.
- Browne, C. A., C. A. Munroe, I, 494.
- Browne, F. J., clinical and veterinary uses of wheat-germ oil and vitamin-E preparations. V. Critique of vitamin-E therapy, III, 1074.
- Browne, S. L. See Karády, S., Maughan, G. B., and Rose, B.
- Browne, K. M. R., Golgi apparatus and other cytoplasmic bodies in *Spirostomum ambiguum*, III, 2.
- See also Gatenby, J. B.
- Browne, W. A. See Reid, J. D.
- Browning, B. L., micro-extraction apparatus and separating funnel, I, 224.
- Browning, C. H. See Glen, W. L.
- Browning, G. L. See Small, L.
- Browning, G. M. See Brown, D. S.
- Browning, C. See Shreve, R. N.
- Browning, P. See Glen, W. L.
- Brownlee, G., role of aromatic amino-group in deranged pigment metabolism, III, 709. Therapeutic index for coal-tar antipyretics, III, 713.
- Brownlee, I. E. See Osgood, E. E.

- Broxon, J. W., and Merideth, G. T., application of Clay's new value of the Jaffé-Zanstra coefficient for air to high-pressure ion current measurements, I, 2. γ -Ray ion currents in air at high pressures and high gradients at high and low temperatures, I, 396.
- Broyer, T. C. See Crafts, A. S., and Skoog, F.
- Brubaker, G., scattering of α -particles by argon, oxygen, and neon, I, 114, 349.
- and Pollard, E., maximum energy of the protons emitted by boron under α -particle bombardment, I, 6.
- See also Pollard, E.
- Bruce, E. C., and Russell, G. A., petrography of the crystalline limestones and quartzites of the Grenville series [of Ontario], I, 628.
- Bruce, E. L., structural relations of some gold deposits between Lake Nipigon and Long Lake, Ontario, I, 586.
- Bruce, H. D., optical thickness of transition layer between transparent media, I, 467.
- See also McBain, J. W.
- Bruce, J. H., dielectric constants of ammonium salts near the lower transition temperature. I. Ammonium chloride and bromide, I, 405.
- Bruce, W. F., and Todd, F., carcinogenic hydrocarbons. III. 20-isopropylcholanthrene; fluorescence and crystal forms of methyl-, ethyl-, and isopropylcholanthrene, II, 105.
- Bruchhausen, F. von, and Gerhard, H., constitution of asarinin, II, 278.
- Bruck, H., extension of the $1^1P_1-m^1S_0$ series of zinc, I, 111. Measurement of optical life-periods in an atomic jet excited by electron impact, I, 441.
- Bruck, J. See Späth, E.
- Bruckner, V. See Ivanovics, G.
- Bruckner, W. J., Wies, C. H., and Lavietes, P. H., anorexia nervosa and pituitary cachexia, III, 260.
- Brücke, E. T., and Schröcksnadel, H., effect of vagus stimulation on the accelerans action on the heart, III, 453.
- Brücke, F. T. von, and Jesserer, H., comparative action of spasmolytic drugs on experimental cardiospasm in rabbits, III, 1001.
- Brückner, L. See Martini, P.
- Brückner, C., active atom in heptachloropropane, II, 2.
- Brückner, Hans. See Ferber, E.
- Brühl, R., experiences with diethylstilboestrol preparations, III, 589.
- Brühl, W., action of insulin [on gastric secretion], III, 380. Action of insulin in allergic conditions, III, 477.
- Brüll, L., and Grift, F., iodometric determination of gold, I, 220. Absorption spectra of quinones, I, 239. Quinhydrone. V., I, 262.
- and Minchilli, M., quinhydrone. IV., II, 219.
- See also Ciusa, R.
- Brüll, Z., experimental therapy in central nervous system lesions, III, 573.
- Brüner, H., simple method for physiologic stimulation of the carotid sinus, III, 21.
- and Mertens, W., blood pressure and pulse rate during bleeding and re-infusion, III, 235.
- Bruenn, H. G. See Levy, R. L.
- Bruère, P., and Bouchereau, P., chemical, physiological, and neutralising action of hexamethylenetetramine on dichlorodiethylsulphide (ypérite or lost), II, 52.
- Brues, A. M., and Marble, B. B., lymphoblastoma in mice following administration of carcinogenic tar, III, 1062.
- Bruesch, S. R. See Davenport, H. A.
- Briet, E., "dolomies" and dolomitic limestones, I, 585.
- Bruevitz, S. W., Pevzniak, V. L., Ponizovskaja, V. L., and Sibirjakov, M. A., accumulation of nutrient salts in mud water of fresh-water basins, I, 392.
- Bruger, M., Localio, S. A., and Guthrie, N. W., effect of alcohol on normal kidney and kidney of Bright's disease, III, 843.
- Burgi, G., interlinking fibrils between the organs of Ruffini in mammals and relationships between fasciculi of tendon and the ramifications of the axon in the nervous organ of Golgi, III, 128. Description of the optic chiasma and hypothalamic commissure in a case of complete atrophy of the optic tract in man, III, 129.
- Bugman, P. See Hoekstra, R. A.
- Brugsch, H., and Pratt, J. H., short-wave and ultra-short-wave diathermy, III, 783.
- Brugsch, J. T., quantitative porphyrin metabolism in man. VII.—IX., III, 78, 172.
- and Brunsting, L. A., porphyrins in dermatology, III, 171.
- Bruining, H., secondary electron emission. II. Absorption of secondary electrons. III. Secondary electron emission caused by bombardment with slow primary electrons, I, 51.
- and De Boer, J. H., secondary electron emission. IV. Compounds with a high capacity for secondary electron emission. V. Mechanism of secondary electron emission, I, 503.
- Bruins, E. M., decay of the penetrating cosmic rays, I, 175.
- See also Clay, J.
- Brühl, A., separation and purification of samarium from mixtures of the rare earths by reduction to samarium(II) chloride, I, 332.
- Brulé, M., Hillemand, P., and Gaube, R., a new case of hemolytic anemia with hemoglobinuria and hemosiderinuria, III, 6.
- Brull, L., transplanting non-anæsthetised kidneys in the dog, III, 844. Normal content of parathyroid hormone of blood of anæsthetised dog, III, 1049. Action of parathyroid, III, 1049.
- and Carbunescu, G., effect of the parathyroid on kidney, III, 1049.
- See also Barac, G.
- Brull, R. See Kauffmann-Cosla, O.
- Brumm, H. J. See Barron, E. S. G.
- Brummelkamp, R., relation between area of the frontal cortex to that of the entire brain in apes and man, III, 372. Cortical surface in relation to weight of cortex and brain weight, III, 805.
- Brun, G. C., cholesterol content of red blood cells in man, III, 640.
- Brun, M., modifications of vestibular chronaxie in rabbits under the influence of alcohol, III, 473.
- Brun, P., electrical properties of organo-metallic [compounds], I, 474.
- Bruneau, J. See Genevray, J.
- Brunei, A., utilisation by *Aspergillus niger* of nitrogenous substances arising from uric acid degradation; mesoxaldecaboxylase, oxaluricase, and parabanase, III, 627. Evolution of allantoinase in the mycelia of *Aspergillus niger* and *A. phaniciis*, III, 627.
- and Échevin, R., glyoxylic ureides in the evolution of the flower and of the fruit of *Acer pseudoplatanus*, L., III, 107. Utilisation of allantoin by higher plants, III, 799.
- See also Échevin, R., and Molliard, M.
- Bruner, D. W. See Edwards, P. R.
- Bruner, H. D., effect of parenteral liver extract on blood picture of newborn rats, III, 1025.
- Erve, J. van de, and Carlson, A. J., blood picture of rats from birth to twenty-four days of age, III, 446.
- Brunner, E. K. See Hotchkiss, R. S.
- Brunner, K. See Bauer, K. H.
- Bruno, B., modification of Hagedorn and Jensen's blood-sugar method, III, 962.
- Bruns, B., reaction mechanism of oxidation of carbon monoxide on the surface of hopcalite. II. Role of water bound to the hopcalite on the catalytic process, I, 87.
- Frumkin, A., Jofa, S., Vanjukova, L., and Zolotarevskaja, S., maxima on current-voltage curves, I, 202.
- See also Maidanovskaja, L., Richlikov, G., and Zolotarevskaja, S.
- Bruns, H. See Schlomka, G.
- Bruns, W., sulphaniilamide treatment of gonorrhœa, III, 774.
- Brunschwig, A., production of primary bone tumours (fibrosarcoma of bone) by intramedullary injection of methylcholanthrene, III, 491.
- Frohaska, J. van, Clarke, T. H., and Kandel, E. V., secretory depressant in gastric juice of patients with pernicious anemia, III, 811.
- Brunst, V. V., action of X-rays on regeneration of newt limbs, III, 543.
- See also Scheremetieva, K. A.
- Brunstetter, B. C., Myers, A. T., Wilkins, H. L., and Hein, M. A., simultaneous quantitative determination of seven elements in grasses and legumes spectrographically, III, 949.
- See also Myers, A. T.
- Brunsting, L. A., treatment of psoriasis by ingestion of massive doses of vitamin-D, III, 76.
- See also Brugsch, J. T.
- Brussel, J. A., congenital absence of bones of lower limb, III, 887.
- Brustier, V., Valdiguié, P., and Blanc, P., decolorisation of fluorescein, II, 276.
- Brutzeus, M., a thermochemical constant and its relations with electronic energy values, I, 128. Thermochemistry of nitrogen compounds, I, 372.
- Bryan, A. H., and Metzger, M. A., insensible loss of water in diabetes insipidus, III, 49.
- Bryan, W. R. See Knudson, A.
- Bryant, A. R. See Carpenter, L. G.
- Bryant, G. W., Lehman, G., and Knoefel, P. K., action of magnesium on central nervous system: antagonism by calcium, III, 510.
- Bryant, H. W. See Burger, A.
- Bryant, J., and Fairman, H. D., chemotherapy of cerebrospinal fever, III, 611.

- Bryant, J. B., unusual case of salt poisoning, III, 284.
- Bryant, J. M., and Webb, J. S., determination of Curie point temperature by high-frequency resistance, I, 221.
- Bryant, J. T. See Adams, J. I.
- Bryant, S. A. See Campbell, W. G.
- Bryant, W. M. D., optical properties of sulphamic acid, I, 556. Dynamic isomerism of acetaldehyde-2:4-dinitrophenylhydrazones, II, 6.
- and Mitchell, J., jun., optical crystallographic studies with the polarising microscope. II. Identification of the *p*-bromoanilides of lower aliphatic acids, II, 4.
- See also Smith, D. M.
- Brydówna, W., oximes of 4:4'-dinitrobenzil, II, 269.
- Brzezinski, S., normal serum content of antistaphylolysin in Poland, III, 527.
- Buben, N. J., and Sebechter, A. B., chemical reactions in electric discharge. IV. Recombination of nitrogen atoms on metals, I, 573.
- Bublitz, H. See Weicker, B.
- Buhnov, M. A., experimental traumatic shock, III, 363.
- See also Lepukaln, A. F.
- Bucciante, L., structure of the azygous vein in man, III, 124. Differences in wall-thickness of a vein in relation to the contiguous organs, III, 124. Existence of smooth muscle cells in the wall of the folds of the dura mater, III, 132. Morphology and morphogenesis of intercostal muscles and ligaments, III, 641.
- Buch, F. L., vascular disturbances during anaphylactic shock in birds, III, 364.
- Buch, H. See Buch, I.
- Buch, I., and Buch, H., improved King and Armstrong method for determination of phosphatase activity in serum, III, 1030.
- Buchanan, B. F., factors affecting the time of solution of glucose, I, 253.
- Buchanan, D., asymptotic oscillations within the helium atom, I, 176.
- Buchanan, J. See Riebsomer, J. L.
- Buchanan, J. A., and Ballweg, H. A., pituitary dwarfism treated with antuitrin-G, III, 577.
- Buchanan, K. S. See Sure, B.
- Bucher, K., leucopenia following intravenous injection of glycogen, III, 812.
- See also Staub, H.
- Bucher, O., influence of fixation on colloid of the thyroid gland, III, 40.
- Bucher, R., flow of water through a gel, III, 195. Blood plasma gel as culture medium, III, 531.
- Buchgraber, D., standardisation of radium and radon solutions, I, 503.
- Buchheim, W., Stuart, H. A., and Menz, H., double refraction of streaming molecular liquids, I, 357.
- See also Stuart, H. A.
- Buchholtz, M. See Ferguson, C.
- Buchholz, K. See Windaus, A.
- Buchman, E. R., and Richardson, E. M., thiamin [aneurin] analogues. I. β -4-Methyl-5-thiazolylalanine, II, 289.
- See also Bonner, J.
- Buchthal, F., and Lindhard, J., acetylcholine block of motor end-plate and electrical stimulation of nerve, III, 566.
- and Petérfi, T., p.d. in *Amæba*, III, 522.
- Buchwald, C. E. See Cooper, F. S., and Zahl, P. A.
- Buchwald, H. See Müller, Friedrich.
- Buchy, A. See Guilliermond, A.
- Buck, F., Blum, E., and Aren, M., thyrotropic action of prolonged injections of pregnancy urine in guinea-pig, III, 756.
- Buck, J. H., proton-induced radioactivities. III. Zinc and selenium targets, I, 116.
- Strain, C. V., and Valley, G., resonance transmutation of Se (34) by protons, I, 4.
- See also Barnes, S. W., and DuBridge, L. A.
- Buck, J. M. See Cotton, W. E.
- Buck, R. W., physiologic dullness of the right apex, III, 367.
- Buck, S. C. See May, H. B.
- Buckingham, P. E. See Roth, P.
- Buckingham, R. A., classical equation of state of gaseous helium, neon, and argon, I, 68.
- See also Bates, D. R., and Massey, H. S. W.
- Buckler, E. J., and Norrish, R. G. W., sensitised explosions. IV. Carbon monoxide-oxygen reaction catalysed by nitrogen peroxide, I, 528.
- Buckley, H. E., some problems connected with crystal-growth, I, 512.
- Buckner, G. D., Insko, W. M., jun., Martin, J. Holmes, and Harms, A., influence of distillery slop on production of chicken fat, III, 162.
- Bucksteeg, W., symbiotic relation between cellulose-decomposing and nitrogen-fixing bacteria, III, 328.
- Bucy, P. C., sulphanilamide in the treatment of brain abscess and prevention of meningitis, III, 303. Athetosis and tremor, III, 830.
- Budanov, A. See Kaplanski, S.
- Budde, R. N. See Masuda, M.
- Buddenbrock, W. von, function of aquatic lungs of *Holothuria*, III, 824.
- Buddington, A. F. See Callaghan, E.
- Budenholzer, R. A., Sage, B. H., and Lacey, W. N., phase equilibria in hydrocarbon systems. XXIII. Joule-Thomson coefficient of methane. XXIV. Joule-Thomson coefficient of gaseous mixtures of methane and ethane, I, 249, 605.
- Budlowsky, See Reiss, M.
- Budó, A., Fischer, E., and Miyamoto, S., effect of molecular form on dielectric relaxation, I, 302.
- and Kovács, I., perturbations between Σ -terms of different multiplicity, I, 167.
- Bühler, H., chemotherapy of surgical tuberculosis, III, 504.
- Büchmann, P., serum-iron in myeloblastic leukaemia, III, 549.
- and Heyl, E., serum-iron and influenza, III, 893.
- See also Stödtmeister, R.
- Büchner, E. See Meerwein, H.
- Büchner, F., interpretation of the electrocardiogram [as seen by the pathologist], III, 360.
- Buechner, W. W. See Hill, A. G.
- Bückmann, H. J. See Fricke, R.
- Bueding, E. See Lipschitz, W. L.
- Buehem, F. S. P. van, relationship of erythroblastic anaemia and steatorrhoea, III, 351.
- Buehler, C. A., surface tension-viscosity relation, I, 63.
- and Masters, J. E., identification of aromatic sulphones, II, 419.
- Bühler, F., action of hormones on the prostatic state of rats, III, 142.
- and Bayer, L., action of sex hormones on bleeding- and coagulation-time, III, 144.
- Bühler, K., and Sander, E., action of silo-gran in pulmonary tuberculosis, III, 307.
- Buehrer, T. F., Mason, C. M., and Crowder, J. A., chemical composition of rayless goldenrod (*Aplopappus hartwegii*), III, 638.
- Bülbring, E., and Burn, J. H., blood flow during musculo contraction and Orbelli phenomenon in dog, III, 362. Factors affecting neuromuscular transmission, III, 566.
- Buell, M. V., preliminary ashing of soft tissues in determination of cations, III, 1114.
- Bürger, K., simplification of Pregl's method of determining carbon and hydrogen, II, 132.
- Bürger, M., adaptation in gastro-intestinal and metabolic diseases, III, 770.
- and Plötnner, K., nature of unsaponifiable substances of human serum, III, 554.
- Buerger, M. J., photography of interatomic distance vectors and of crystal patterns, I, 537.
- Bürgi, E., physiological and therapeutic significance of skin permeability, III, 418.
- Bürümcekcı, K., case of atypical amyloidosis (paramyloidosis), III, 299.
- Busing, K. H., treatment of infectious diseases with vitamin-C, III, 604.
- and Raabe, W., vitamin-C content of grape juices preserved with sulphur dioxide, III, 290.
- Büsem, W., Cosmann, O., and Schusterius, C., dehydration of gypsum, I, 371.
- See also Tschelschwilli, L.
- Büttinghaus, A. See Tofaute, W.
- Büttner, [alkalis in] silicate analysis, I, 487.
- Büttner, G., surgical treatment of hypothyroid conditions, III, 680.
- Büttner, H., primary characteristic of the Townsend discharge in rare gases, I, 228.
- Büttner, H. E. See Maassen, R.
- Buffle, J. P., phosphate content of the sodium in Lake Geneva, I, 584.
- Bugakov, W., and Ribalko, F., dependence of diffusion coefficients of metals on grain size, I, 17.
- Bugnard, L. See Auvergnat, R., and Baisset, A.
- Bugyi, B., spectroscopy of anti-anæmic liver extracts, III, 116. Photochemistry of "anti-lytic factor" in carcinoma, III, 279. Spectrographic examination of pituitary hormone preparations, III, 839.
- See also Kiszely, G., and Papp, J.
- Buie, B. F. See Larsen, E. S.
- Buinov, N., Juravleva, M., Komar, A., and Tschufarov, G., iron crystal orientation on magnetite reduced by hydrogen, I, 304.
- Bujard, E., developmental kinematics, III, 224. Thymus and reticulo-endothelial system, III, 1023.
- Buka, B. See Leopold, H.
- Bukantz, S. C., Bullowa, J. G. M., and De Gara, P. F., free polysaccharide in blood of pneumococcal pneumonia patients, III, 1102.

- Bukvina, A. A. See Grünberg, G. J.
- Bulanova, T. F. See Freidlin, L. C., and Vaskevitch, D. N.
- Bulger, H. A. See Orgel, M. N.
- Bull, D. C. See Scudder, J.
- Bullard, F. M., rosebud meteorite, Milam Co., Texas, I, 496.
- Bulliard, H., and Grundland, I., oestrogenic power of polypeptides, III, 57.
- Grundland, I., and Moussa, A., detection of the phosphorus of adrenal phosphatides by radioactive phosphorus, III, 260. Activity of the exchange of phosphorus by radioactive phosphorus in cytoplasmic phosphatides, III, 609.
- See also Grundland, I.
- Bullinger, E. See Roche, J.
- Bullock, J. L. See Dorn, H. W.
- Bullowa, J. G. M. See Bukantz, S. C., Ratish, H. D., and Scudi, J. V.
- Bullrich, R. A., Nicola, O. F. F., and Acevedo, H. J., pharmacology of ouabain (acocantherin), III, 712.
- Bulmer, F. M. R. See Jephcott, C. M.
- Bult, A. R., and Sorgdrager, C. J., influence of sex on vitamin-A metabolism in rats, III, 284.
- Bunde, C. A., and Hellbaum, A. A., chemical and physiological properties of gonadotropic antagonist, III, 677.
- Bunde, K. See Jander, W.
- Bundesen, H. N., Fishbein, W. J., and White, J. L., diphtheria immunity in Chicago, III, 794.
- Bundschuh, H. E., and Kuschinsky, G., posterior-pituitary-like substances in urine, III, 578.
- See also Kuschinsky, G.
- Bungardt, K. See Esser, H.
- Bungardt, W., and Bollenrath, F., diffusion of magnesium in aluminium, I, 69.
- Bunina, V. I. See Schuikin, N. I.
- Bunker, J. W. M., and Harris, R. S., reappraisal of vitamin-D milks, III, 404.
- See also Harris, R. S.
- Bunn, C. W., crystal structure of long-chain normal paraffin hydrocarbons; "shape" of the methylene group, I, 306.
- Bunster, E., and Meyer, R. K., effect of oestrin on the gonad-stimulating complex of the anterior pituitary of parabiotic rats, III, 57.
- Bunting, E. N. See Geller, R. F.
- Bunting, R. W. See Jay, P.
- Buraway, A., light absorption of organic compounds and the nature of unsaturated linkages, I, 449.
- Burbank, C. J., new X-ray lines in the L series resulting from K Auger transitions, I, 502.
- Burbank, R. See Korenchevsky, V.
- Burch, A. B., correlative differentiation of amphibian epithelial hypophysis, III, 972.
- Burch, E. P., and Meade, J. R., treatment of hemorrhagi retinitis with the anti-hemorrhagic vitamin, III, 404.
- Burch, G. E., simple method for accurate injection of small quantities of fluid, III, 1113.
- and Sodeman, W. A., tonometer for measuring tissue turgor in the human finger tip, III, 20. Determination of venous pressure; relationship of tissue pressure to venous pressure, III, 459.
- See also Sodeman, W. A.
- Burch, J. C. See Phelps, D., and Williams, C.
- Burcham, W. E., and Smith, C. L., experiments of the transmutation of fluorine by protons and deuterons, I, 54. Short-range α -particles from oxygen, nitrogen, and fluorine bombarded with protons, I, 443.
- Burdenko, M. N., and Smirnova, L. G., adrenal syndrome in shock, III, 377.
- Burdett, R. A. See Butler, A. Q.
- Burdick, H. O. See Whitney, R.
- Burdine, N. T., high-frequency glow discharge with internal electrodes, I, 227.
- See also Fox, G. W.
- Burdon, K. L., mouse holder facilitating intravenous inoculations, III, 220.
- Bureau, V., effect of oestrone and progesterone on rabbit uterus studied by the colchicine method, III, 755.
- Bureš, E., and Hrabová, J., isatindiresorcinol (tetrahydroxydiphenyloxindole) and some derivatives, II, 178.
- and Masárek, A., condensation of phenols with formaldehyde, II, 58.
- Ulrychova, M., and Jindra, A., tubascepiadin, II, 245.
- Burford, E. H., and Seib, G. A., inferior lumbar space (triangle of Petit) and the superior lumbar space (lumbar tetragon of Grynfeldt) in American whites and American negroes, III, 541.
- Burford, G. E., use of inert gases in anaesthesia atmospheres, III, 315.
- Burg, A. B. See Brown, Herbert C., and Schlesinger, H. I.
- Burg, J. H. N. van der, experiments with a new combination of indicators (universal indicator), I, 213.
- Burg, W. V., direct titration of sulphate; crythrosin as internal indicator, I, 214.
- Burgatti, P., optical properties of transparent crystals, I, 186.
- Burgdorf, A. L., and Barry, T. A., non-tropical spruce, III, 767.
- Burge, W. E., action of anaesthetics in decreasing negative potential of the brain cortex, with resulting anaesthesia, III, 314.
- Burger, A., and Bryant, H. W., acyl derivatives of dibenzthiophen. II, II, 386.
- Wartman, W. B., jun., and Lutz, R. E., isosteric compounds. I. Acyl derivatives of dibenzthiophen, II, 34.
- Burger, A. L., and Fink, H., acute insufficiency of adrenal glands, III, 682.
- Burger, R., electrodes for electrocardiographic leads from chest and oesophagus, III, 17. Distribution of heart action currents, III, 558.
- Burgert, P. H., Nadler, W. H., and Stott, R., comparison of tests for insulin sensitivity, III, 975.
- Burgess, A. M. See Cutts, M.
- Burgess, E. See Durand, J. L.
- Burgin, L. B., and Higgins, H. L., phlebotenulosis [as an allergic phenomenon], III, 1091.
- Burgoyne, J. H., combustion of aromatic and alicyclic hydrocarbons. II. Ignition of aromatic hydrocarbons at high temperatures, I, 475.
- Burhett, F. L., progress in nutrition, III, 396.
- Burian, H. M., influence of central nervous system on pigment migration in frog retina, III, 674. Fusional movements; role of peripheral retinal stimuli, III, 838.
- Burk, R. E. See Laskowski, L.
- Burkard, O., calculation of [spectroscopic characteristics of] molecules, I, 128.
- Burkart, W. See Reichel, L.
- Burke, B. S. See Teel, H. M.
- Burke, H. E., and Kerr, P. F., nature of mineral particles in sputum and ash of the lungs of silicotics, III, 317.
- Burke, J. C., and McIntyre, A. R., effects of vitamin-B on insulin hypoglycemia and sugar tolerance, III, 285.
- See also McIntyre, A. R.
- Burke, W. J. See Greenburg, L., and Wolfrom, M. L.
- Burkett, H. See Riebsomer, J. L.
- Burkhardt, J., condensation of formaldehyde with α -methylacetoacetic ester, II, 48.
- Burkhart, E. Z., colchicine reactions in ventral prostate of castrated male rats following androgenic treatment, III, 984.
- Burkhart, L., ammonium nutrition and metabolism of etiolated seedlings, III, 212.
- Burlew, J. S. See Morey, G. W.
- Burlingame, E. M., and Reddish, G. F., laboratory methods for testing fungicides used in treatment of epidermatophytosis, III, 628.
- Burmeister, Hans, and Wachholder, K., simple test for the saturation deficit of vitamin-C, III, 496.
- Burmistrov, S. I., drop detection of diazotisable amines, II, 464. Condensation of diarylcarbinols with naphthyl ethers, II, 544. Molecular compounds of α -naphthyl methyl ether with dinitro-compounds, II, 544.
- Burn, J. H., action of drugs in muscular fatigue, III, 567.
- See also Bulbring, E.
- Burnet, F. M., and Lush, D., inactivation of herpes virus by immune sera; experiments using the chorio-allantoic membrane technique, III, 529. Antibody content of human sera in herpes simplex, III, 530. Experimental herpes infection in mice, using chorio-allantoic technique, III, 878.
- Lush, D., and Jackson, A. V., virus-inactivating agent from human nasal secretion, III, 1105.
- Burnett, C. T. See Whitehead, R. W.
- Burnett, R. E., and Russell, J. J., dibenzyl sebacate, II, 493.
- Burnett, R. Le G. See Bell, R. P.
- Burnham, H. D. See Stevenson, D. P.
- Burns, B. D. See Owen, E. A.
- Burns, E. L., and Schenken, J. R., occurrence of urinary calculi in inbred strain of mice treated with oestrogen, III, 981.
- See also Loeb, L.
- Burns, J. C. See Bower, J. O.
- Burns, R. K., jun., effects of oestrone on sex differentiation in *Amblystoma*, III, 683. Effects of testosterone propionate on sex differentiation in *Amblystoma*, III, 683. Effects of female sex hormones in young opossums, III, 1053. Effect of testosterone propionate on sex differentiation in pouch young of opossum, III, 1057.
- Burova, T. A. See Borovik, S. A.
- Burr, E. G., and Mortimer, H., improvements in audiometry at the Montreal General Hospital, III, 574.
- Burr, G. O., and Miller, E. S., synthesis of fats by green plants, III, 212.
- See also Brown, W. R., and Kass, J. P.

- Burr, H. S., Harvey, S. C., and Taffel, M., bio-electric correlates of wound healing, III, 277.
- and Smith, P. K., relationship between the bio-electric potential of rats and certain drugs, III, 277.
- Strong, L. C., and Smith, G. M., bio-electric correlates of methylcholanthrene-induced tumours in mice, III, 281.
- Burrage, L. J., and Allmand, A. J., effect of moisture on sorption of carbon tetrachloride from an air stream by activated charcoal, I, 254.
- Burrell, R. C., and Miller, H. A., vitamin-C content of spring greens, III, 1072.
- Burri, C., Parga-Pondal, I., and Heim, A., garnet-bearing cordierite-andesite from Hoyazo, near Nijar (Almeria Province, Spain), I, 541.
- Burridge, W., law of cardiac stimulation, III, 17. New properties of cardiac muscle, III, 964.
- Burrill, M. W., and Greene, R. R., androgenic function of adrenals in immature male castrate rats, III, 983.
- See also Greene, R. R.
- Burris, R. H. See Wyss, O.
- Burrows, G. J., and Ritchie, E., complex phthalates, II, 479. Preparation of *p*-tolylstibinic acid, II, 490. Co-ordination compounds with 8-aminoquinoline as a chelate group, II, 521.
- Burrows, G. H., thermo-regulator, I, 579.
- Burrows, H., keratinised paracæcal cysts in mice [relation to testosterone], III, 983.
- Burrows, S., and Simpson, J. C. E., triterpene group. IV. Triterpene alcohols of *Taraxacum* root, II, 80.
- Burschies, K., esters of chaulmoogric and hydnocarpic acid and of chaulmoogryl and hydnocarpyl alcohol. III, II, 318.
- Burschtein, R. C., and Gatovskaja, T. V., acidimetric titration of coloured solutions, I, 37.
- Bursi, H. W., and Strecker, G., sodium/chlorine ratio in the urine in liver disease, III, 389.
- Burstein, C. L., effect of divinyl oxide on intestinal activity *in vivo*, III, 270. Effect of short-acting barbituric acid derivatives on intestinal activity *in vivo*, III, 863.
- and Roventine, E. A., anaesthetic efficiency of sodium ethylisoamylthiobarbiturate, III, 314. Apnoea during anaesthesia, III, 366.
- Burstein, M. See Binet, L.
- Burstein, R., exchange between hydrogen and deuterium on charcoal, I, 87.
- See also Petrov, S.
- Burstrom, D. See Bjalve, G., and Nilsson, R.
- Burt, J. B. See Ruddy, A. W.
- Burtenshaw, J. M. L., detection of horse serum (meningococcus antitoxin) in blood and cerebrospinal fluid, III, 418.
- Burton, A. F., action of coramine on the melanophores and nervous system, III, 412.
- Burton, E. F., physical phenomena at the temperature of liquid helium, I, 14.
- Burton, H., and Shoppee, C. W., anionotropic and prototropic changes in cyclic systems. VI. *cis*- and *trans*-3,4-Diphenylcyclopentanones; structure of the ketone obtained by reduction of 2-hydroxy-3,4-diphenyl- Δ^2 -cyclopentenone with hydriodic acid. VII. Structure of the chlorodiphenylcyclopentenone obtained by action of hydrogen chloride on anhydroacetonebenzil, II, 268, 509.
- Burton, M., calculation of bond strengths from photochemical evidence, I, 62. Mechanism of the photolysis of [tri]deuterammonia, I, 88.
- See also Rollefson, G. K., and Taylor, H. A.
- Burt, E., irritant exudation from a millipede, III, 278.
- Burwell, C. G., lines of ionised barium in stellar spectra, I, 50.
- Burwell, C. S., Strayhorn, W. D., Flickinger, D., Corlette, M. B., Bowerman, E. P., and Kennedy, A., circulation during pregnancy, III, 360.
- Burwell, J. T., diffuse electron diffraction patterns, I, 65.
- Bury, C. R., and Mends, J. R., systems sodium chloride-butyric acid-water, sodium chloride-isobutyric acid-water, and potassium isobutyrate-isobutyric acid-water at 25°, I, 372.
- Busch, E., innervation of the intracranial blood vessels, III, 458.
- Buschbeck, H., and Hausknecht, K., action of stilboestrol in women, III, 479.
- Buschke, A., and Konheim, W., actions of A.T. 10 and of thallium, III, 1088.
- Buschke, W. See Alder, P.
- Bush, M. T., preparation of *tert*-butylmalonic acid and its derivatives, II, 200. Preparation of *tert*-butylmalonic acid from neopentyl chloride, II, 241.
- See also Butler, T. C.
- Bushy, A. H. See Kolthoff, I. M.
- Busila, V. See Rascanu, V.
- Businco, L., and Giunchi, G., blood-histamine in ox and localisation of histamine in the blood, III, 119. Determination of histamine (Barsoum-Gaddum, Code), III, 183.
- Busnel, R. G. See Drilhon, A., and Randoine, L.
- Busquet, H., influence of colchicine on circulatory effects of sympathomimetic substances, III, 861. Rhythmic movements of isolated cirrus of leech, III, 1034.
- Bussa, D. See Agnoli, R., and Martini, V.
- Bussabarger, R. A., Cuthbert, F. P., and Ivy, A. C., anemia of pregnancy in gastrectomised and normal dogs, III, 6.
- Busse, A. See Brockmann, H.
- Busse, O., oxygen consumption of isolated tissues of guinea-pigs during the early days of life, III, 498.
- Buswell, A. M., McMillan, G. W., Rodebush, W. H., and Wall, F. T., infra-red absorption studies. VIII. Hydrarzoic acid, I, 596.
- Maycock, R. L., and Rodebush, W. H., infra-red absorption of hydrogen fluoride, I, 549.
- See also Rodebush, W. H.
- Butcher, E. O., hair growth in young albino rats in relation to body size and quantity of food, III, 700.
- and Persike, E. C., jun., effect of antuitrin-S on the thymus of the young albino rat, III, 39.
- Butenandt, A., carcinogenic substances, III, 70.
- and Heusner, A., supposed androgenic action of epiallopregnan-3-ol-20-one, II, 166. *epi*- Δ^5 -Pregnen-3-ol-20-one, II, 328.
- and Hofstetter, H., oestrone sulphate, a physiological excretion product of follicle hormone, II, 379.
- Mamoli, L., Dannenberg, H., Masch, L. W., and Paland, J., Δ^1 -unsaturated steroid ketones, II, 481.
- Butenandt, A., Mamoli, L., and Heusner, A., Δ^1 -allopregnenc-3:20-dione, II, 482.
- and Paland, J., crystalline peroxide of Δ^5 -androstadiene-3:17-diol [diacetate], II, 157.
- and Peters, D., 17-allylt testosterone and its transformation products, II, 76.
- and Schmidt-Thomé, J., conversion of dehydroandrosterone into progesterone; simple artificial preparation of the hormone of pregnancy from cholesterol, II, 119.
- Schmidt-Thomé, J., and Paul, H., transformation of dehydroandrosterone into 17-isoprogesterone and progesterone, II, 328.
- Schmidt-Thomé, J., and Weiss, T., 16-hydroxytestosterone, II, 165.
- and Stodola, F. H., α - and β -leprosol, II, 365.
- and Wolff, A., photochemical transformation of $\alpha\beta$ -unsaturated steroid ketones under the influence of ultraviolet light, II, 328.
- Buth, W., Külz, F., and Rosenmund, K. W., syntheses of spasmolytically active substances, II, 107.
- Butkevitch, G. A., utilisation of broken condensers, I, 45.
- Butkevitch, V. S., and Maruaschvili, L. V., potassium uptake and yield of plants; effect of sodium chloride, III, 799.
- Butler, A. M., electrolyte and water balance, III, 926.
- See also Cushman, M., MacLachlan, E. A., and Shohl, A. T.
- Butler, A. Q., and Burdett, R. A., determination of iodine in sodium tetraiodophenolphthalein, II, 352.
- Butler, C. L. See Green, M. H.
- Butler, E. C. B. See Valentine, F. C. O.
- Butler, E. T. See Bowden, S. T.
- Butler, J. A. V. See Martin, D. C.
- Butler, M. J., and Audrieth, L. F., ammonium and substituted ammonium sulphamates, I, 333. Substituted ammonium sulphamates, II, 302.
- Smith, G. F., and Audrieth, L. F., sulphamic acid as a standard of reference in acidimetry, I, 94.
- Butler, R. D., "Red Beds" type copper occurrence, Wyoming Co., Pennsylvania, I, 108. Silicification types along the hanging wall of the London fault, Mosquito Range, Colorado, I, 344.
- See also Fraser, D. M.
- Butler, R. E. See Sebrell, W. H.
- Butler, T. C., and Bush, M. T., metabolic fate of *N*-methylbarbituric acids, I, 507.
- Butler, W. J., Warren, D. M., and Hammersland, H. L., nutrition as a factor in the incidence of fowl leucosis, III, 349.
- Butlin, K. R., biological production of dihydroxyacetone, III, 428.
- Butom, M. L. See Vinokurov, S. I.
- Butt, E. M., Hoffman, A. M., and Soll, S. N., experimental neutropenia from amidopyrine, III, 1027.
- Butt, H. R., knowledge of vitamins, III, 284.
- and Keys, A., effect of insulin on colloid osmotic pressure of serum, III, 380.
- Power, M. H., and Keys, A., effect of intravenous injection of acacia on colloid osmotic pressure in cirrhosis of liver, III, 555.

- Butt, H. R., Snell, A. M., and Keys, A., plasma-protein in hepatic disease, III, 356.
- Snell, A. M., and Osterberg, A. E., use of vitamin-K in prevention and control of the hemorrhagic diathesis in jaundice, III, 292.
- See also Clark, R. L., jun., Keys, A., and Madding, G. F.
- Butterfield, J. A., brookite in the Millstone Grit of Yorkshire, I, 587.
- Butts, D. C. A., experimental brucellosis, III, 329.
- Butturini, L., absorption of aristouquine, III, 504.
- and Capuzzi, M., effect of β -phenylisopropylamine on respiration, III, 508.
- Butz, L. W., and Hall, S. R., characteristics of the androgenic fractions of bull urine, III, 266.
- Buvat, J. F. See Sohler, R.
- Buxton, C. L., and Westphal, U., recovery of pregnandiol in urine of men treated with progesterone, III, 1056.
- Buxton, L. H. D. See Gilchrist, M. L.
- Buxton, L. O., carotenoids in yellow maize, III, 639.
- Buza, L. von, haemolytic action of anthrax bacilli, III, 874.
- Buzágh, A. von, influence of the fine structure of adsorption layers on the adherence of microscopic particles, I, 73.
- Bychowska, M. See Kroszczynski, S.
- Bye, J., conductometric study of the neutralisation and displacement of molybdic acid and precipitation of lead molybdate, I, 144.
- Byerly, T. C., Ellis, N. R., Nestler, R. B., and Titus, H. W., effect of calcium and phosphorus content of diet of chickens on egg production and hatchability, III, 72. Effects of light, soya-bean, and other diet supplements on seasonal hatchability and egg production, III, 77.
- Byers, D. H., and Mellon, M. G., colorimetric determination of chlorine with *p*-aminodimethylaniline, I, 335.
- Byers, G. B. See Price, A. E.
- Byers, H. G. See Alexander, L. T.
- Byers, R. K., tonic neck reflexes in children considered from prognostic standpoint, III, 1036.
- Byers, W. H., electric moment of cello-solves, I, 242.
- Bylina, S. See Auler, H.
- Bynum, W. T., recurrences of undulant fever (brucellosis) following administration of sulphanilamide, III, 610.
- Byrnes, A. E. See Franks, W. R.
- Byrom, F. See Wilson, C.
- Bytinski-Salz, H., adrenergic melanophores in *Bombina*, III, 348.
- C.
- Cabannes, J., water of crystallisation in gypsum, I, 7. Luminescence of the night sky, I, 439.
- and Aynard, R., nitrogen excitation in the night sky, I, 596.
- and Daure, P., Raman spectrum of benzene in circularly polarised light, I, 451.
- Dufay, J., and Gauzit, J., CN bands in the night sky spectrum, I, 6.
- Cabot, H. See Gaudin, H. J.
- Cabrera, B., influence of water on values of magnetic constants of the rare earths, I, 131, 409.
- and Duperier, A., magnetism of chlorides of the palladium and platinum triads of elements, I, 555.
- Caccialanza, P., blood-glutathione. IV. Thyroparathyroidectomy and treatment with glutathione, III, 476. Tissue-glutathione. I. Liver- and adrenal-glutathione in normal and thyroidectomised dogs, III, 1048.
- Cacciapuoti, B. N., decay constant of ^{82}P , I, 4. Radioactivity induced in molybdenum by deuterons, I, 173. Radioactive isotopes of element 43, I, 173.
- and Ferla, F., radio-cobalt as indicator for determining the solubility of $\text{Co}(\text{OH})_3$. I, I, 315. Use of radio-cobalt for determination of solubility of its trivalent salts with α -nitroso- β -naphthol and β -nitroso- α -naphthol, I, 466.
- Cacciarelli, R. A. See Grecca, W. D.
- Cachera, R., vascular modifications following cerebral embolism, III, 458.
- See also Carnot, P., and Villaret, M.
- Cachin, C. See Vallery-Radot, P.
- Cacioppo, F., female sex hormones and gaseous metabolism. IV. Effect of urine of pregnant women, III, 171.
- and Fazio, F., female sex hormones and gaseous metabolism. V. Effect of boiled urine of pregnancy. VI. Effect of anterior pituitary extracts, before and after heating, III, 137.
- Cadden, J. F., glutathione content of blood during the puerperium, III, 12.
- and Faris, A. M., non-protein-, urea-, and rest nitrogen of the blood during labour and the puerperium, III, 58.
- and Stander, H. J., uric acid metabolism in eclampsia, III, 1076.
- See also Flinn, R. H.
- Cady, G. H., nomenclature of the megascopic description of Illinois coals, I, 588.
- Cady, J. B., and Herrick, J. F., comparative study of methods of measuring blood pressure, III, 659.
- Caffey, J., lead poisoning associated with active rickets, III, 1073.
- Caglioti, V., and Giacomello, G., structural analysis and chemical linkings. V. Structure of molecular lattices determined by means of Fourier analysis, II, 371.
- Cahane, M., blood-sugar and liver- and muscle-glycogen after removal of mammary glands in the lactating guinea-pig, III, 59. Classification of endocrine syndromes, III, 1044.
- and Cahane, T., regulation of the thyroid by centres in the infundibulum, III, 377.
- Cahane, T. See Cahane, M.
- Cahen, R., "potential" character of effects of insulin on isolated heart and intestine, III, 582.
- and Ardoint, P., biological assay of gonadotropic activity of extracts of urine of pregnancy, III, 755.
- and Feuer, H., micro-electrophotometric determination of morphine, II, 464.
- and Moisset de Espanes, E., toxic and cardiovascular effects of *Gelsemium elegans*, III, 1001.
- See also Tiffeneau, M., and Urbain, A.
- Cahill, W. M., and Jackson, R. W., proof of synthesis and configurational relationships of abrine, II, 40. Hypaphorin: racemisation of its ester and properties of other derivatives, II, 85.
- See also Jackson, R. W.
- Cahn, L. See Rogers, A. F.
- Cahn, R. S. See Boam, J. J.
- Cahn, T., and Houget, J., glucides; [carbohydrates], III, 173. Metabolism in experimental diabetes, III, 407.
- Cahoon, R. See Morrison, J. L.
- Cahuzac, M., and Marques, P., resistance of newly-born dogs to electrocution, III, 596.
- See also Sendrail, M.
- Cailleau, R., ascorbic acid as a growth-factor in *Trichomonas columbae*, S., III, 628. Cholesterol as growth factor for flagellate *Trichomonas batrachorum*, III, 873. Effect of substances similar to vitamin-C as growth factors for the flagellate *Eutrichomastix colubrorum*, III, 1011.
- Caillère, (Mlle.) S. See Orcel, J.
- Cairns, T. L. See Adams, R.
- Cajori, F. A., and Vars, H. M., effect of chloroform anaesthesia on serum-amylase and liver-esterase, III, 313.
- See also Rhoads, J. E.
- Calam, C. T., Clutterbuck, P. W., Oxford, A. E., and Raistrick, H., biochemistry of micro-organisms. LXI. Molecular constitution of geodin and erdin, two chlorine-containing metabolic products of *Aspergillus terreus*, Thom. II. Dihydro-geodin and -erdin: synthesis of their trimethyl ethers, II, 268.
- and Oxford, A. E., halogen derivatives of the methyl ethers of orcinol, *p*-orsellinic acid, and phloroglucinol-carboxylic acid, II, 159.
- Oxford, A. E., and Raistrick, H., biochemistry of micro-organisms. LXIII. Itaconic acid, a metabolic product of a strain of *Aspergillus terreus*, Thom., III, 1010.
- Calas, R., conversion of a C_6 into a C_5 ring by pinacolic dehydration, II, 325.
- Camphorophorone and pulegone: hydrogenation products and their structure. I. II. Hydrogenation by sodium in presence of aqueous ether or of absolute alcohol. III. Hydrogenation in presence of metallic catalysts, II, 483.
- See also Godchot, M.
- Calaway, P. K. [with Henze, H. R.], utilisation of aryloxy-ketones in the synthesis of quinolines by the Pfitzinger reaction, II, 388.
- Calcinai, M., effect of hydrogen peroxide on autolysing bacterial suspensions, III, 878. Effect of hydrogen peroxide on serum proteins as function of temperature, III, 961.
- Calcott, W. S., Tinker, J. M., and Weinmayr, V., hydrofluoric acid as condensing agent. I. and II., II, 254, 311.
- Calder, R. M., autoplasmic splenic grafts: their use in study of growth of splenic tissue, III, 963.
- Steen, C., and Baker, L., blood studies in brucellosis, III, 810.
- Calderwood, H. N., durable protector for cork stoppers, I, 582. Portable self-closing hydrogen sulphide dispenser, I, 582.
- See also Koerker, F. W., and Rollins, D. B.

- Caldwell, B. P., and Albano, V. J., rate of solution of zinc and aluminium while cathodic, I, 572.
- Caldwell, C. C., and Le Fèvre, R. J. W., benzil—a skew molecule? I, 458.
- Caldwell, M. L., Doebbeling, S. E., and Wicklen, F. C. von, influence of heavy water on activities and stabilities of the amylases of barley and malted barley, III, 323.
- Caldwell, W. E., gold content of sea-water, I, 107.
- Caldwell, W. T., and Thompson, T. R., nuclear methylation of phenols; synthesis of intermediates in preparation of anti-sterility factors, II, 259. Orientation of nuclear methylation in phenols and naphthols, II, 523.
- Caley, E. R., and Baker, A. L., jun., sensitivity of the carbonate test for lithium, I, 216.
- Califano, L., and Kertesz, D., tyrosinase and catechol-oxidase, III, 321.
- Calin, J. See Vayon, G.
- Calingaert, G. See White, J. D.
- Calinicensco, N., depolarisation of light traversing starch suspensions, I, 416.
- Callaghan, E., alunite deposits of the Marysvale region, Utah, I, 47. Manganese deposits of the Drum Mountains, Utah, I, 108.
- and Buddington, A. F., metalliferous mineral deposits of the Cascade Range in Oregon, I, 48.
- Callan, T. P. See Toennies, G.
- Callerio, C., immunity to experimental infection with types I, II, and III pneumococcus in animals treated with 2-(p-aminobenzenesulphonamido)pyridine, III, 999.
- Callihan, D. See Waldman, B.
- Callison, E. C. See Booher, L. E.
- Callow, A. E., Griffith, R. O., and McKeown, A., photo-reaction between bromine and hydrogen peroxide in aqueous solution, I, 272. Photo-oxidation of nitrite ion by bromine, I, 330.
- Callow, N. H., isolation of two transformation products testosterone from urine, III, 587.
- and Callow, R. K., isolation of 17-ketosteroids from urine of normal women, III, 754.
- Callow, R. K., Emmens, C. W., and Stroud, S. W., extracting compounds related to steroid hormones from human urine, III, 1055.
- See also Taylor, T. W. J.
- Callow, R. K. See Callow, N. H.
- Calmon, C. See Harned, H. S.
- Calo, A., auscultation and registration of auricular sounds, III, 744.
- See also Clerc, A.
- Caltabiano, D., hapten capacity of irradiated ergosterol, III, 1106.
- Calus, W. See Moliński, S.
- Calvery, H. O., chronic effects of ingested lead and arsenic, III, 414.
- Laug, E. P., and Morris, H. J., chronic effects on dogs of feeding diets containing lead acetate, lead arsenate, and arsenic trioxide in varying concentrations, III, 413.
- See also Finner, L. L., Grant, R. L., Laug, E. P., and Lightbody, H. D.
- Calvin, D. B. See Mullin, F. J.
- Calvin, J. K., and Carbone, J., erythrocytes in urinary sediment in health and in disease (scarlet fever); studies by o-tolidine test, III, 1060.
- Calvin, M., homogeneous catalytic hydrogenation, I, 529. Resonance and physical and chemical properties of diphenyl types, II, 412.
- Camarella, C. See Puddu, V.
- Cambi, L., and Malatesta, L., germanium, gallium, and indium in Sardinian blends, I, 435.
- and Monsellse, G. G., cathodic evolution of arsenic in electrolytes containing zinc, I, 378.
- Cambier, P. See Lambert, P. P.
- Cambieri, (Signa.) F. See Oddo, B.
- Cambron, A., synthesis of α -naphthylacetic acid, II, 212.
- Camerman, J. See Maisin, J.
- Cameron, A., Harbard, E. H., and King, A., non-stoichiometric oxides. I. Oxides of chromium, I, 155.
- See also Bhatnagar, S. S.
- Cameron, A. E., oxidation-reduction potentials of unstable organic systems, I, 83.
- Cameron, B. C. See Noble, A.
- Cameron, D. E., and Jellinek, E. M., insulin treatment of schizophrenia. II. Pulse rate and blood pressure, III, 902.
- See also Hoagland, H., and Randall, L. O.
- Cameron, E. N., mineral deposits of the north-eastern part of the Humboldt range, Nevada, I, 344.
- Cameron, G., and Chambers, R., direct evidence of function in kidney of an early human fetus, III, 390.
- Cameron, G. D. W., seasonal variation in response to guinea-pigs to toxoid, III, 330.
- Cameron, G. R., barbiturates, III, 862.
- and De Saram, G. S. W., permanently dissociating the spleen from the portal circulation (the "marsupialised" spleen) and its use in the study of experimental liver cirrhosis, III, 358. Effect of liver damage on action of barbiturates, III, 389.
- Doniger, C. R., and Hughes, A. W. M., toxicity of lauryl thiocyanate and *n*-butylcarbitol thiocyanate (lethane 384), III, 1004.
- Cameron, J. See Mitchell, S.
- Cameron, R. R. See Donaldson, J. K.
- Cameron, W. H. B., and Elliott, A., emission band spectrum of chlorine. III. Continua, I, 289.
- Cammer, L., and Griffith, F. R., jun., adrenaline and the metabolism of peripheral tissues, III, 911.
- Camp, J. D. See Eaton, L. M.
- Camp, W. J. R., potentiation of digitalis action by adrenaline and potassium, III, 411.
- See also Maher, F. T.
- Campagna, V. M., effect of short waves on formation of bone callus in animals with blocked reticulo-endothelial system, III, 784.
- Campbell, A., Peltier effect demonstration with approximate measurement, I, 308.
- Campbell, A. C. P., and Biggart, J. H., Wernicke's encephalopathy (polio-encephalitis hæmorrhagica superior): its alcoholic and non-alcoholic incidence, III, 494.
- Campbell, (Mrs.) A. J. R. See Campbell, A. N.
- Campbell, A. N., and Brown, E. A., action of carbon dioxide and of carbon monoxide on manganese, I, 86.
- and Campbell, (Mrs.) A. J. R., systems $\text{BaCl}_2\text{-BaF}_2\text{-H}_2\text{O}$, $\text{SrCl}_2\text{-SrF}_2\text{-H}_2\text{O}$, $\text{CaCl}_2\text{-CaF}_2\text{-H}_2\text{O}$, $\text{NaCl-NaF-H}_2\text{O}$, and $\text{KCl-KF-H}_2\text{O}$ at 25°, I, 81.
- Campbell, B., comparative anatomy of the dorsal interosseous muscles, III, 441. Shoulder anatomy of moles, III, 737.
- Campbell, Barbara, and Willard, M. L., optical studies on stovaine and three related compounds, I, 130.
- Campbell, (Miss) B. K. See Campbell, K. N.
- Campbell, C. D., Kruger alkaline syenites of Southern British Columbia, I, 496.
- Campbell, D., and Morgan, T. N., cyanosis caused by sulphonamide compounds, III, 1084.
- Campbell, D. A. See Bourne, M. G.
- Campbell, D. F., geology of the Bonanza King mine, Humboldt Range, Pershing Co., Nevada, I, 285.
- Campbell, D. H., and Fourt, L., immunochemistry of catalase, III, 879.
- See also Lennette, E. H.
- Campbell, E. H. See Clark, B. B., and Himwich, H. E.
- Campbell, H. C. See Rice, O. K.
- Campbell, H. H. See Greey, P. H.
- Campbell, H. L., and Sherman, H. C., nutritional effects of the addition of meat and green vegetable to a wheat-and-milk diet for rats, III, 397.
- See also Sherman, H. C.
- Campbell, J. See Brody, S.
- Campbell, James, assay of the potency of anterior pituitary extracts which increase liver-fat, III, 258.
- Campbell, J. A., increase of resistance to oxygen want in animals on diets, III, 366. Inclusion body in the liver cells of the mouse, III, 433. Resistance to oxygen want, III, 564. Protein and resistance to oxygen want, III, 564. Carcinogenic agents present in atmosphere and incidence of primary lung tumours in mice, III, 846. Zein and resistance to oxygen want, III, 899.
- and Poulton, E. P., oxygen and carbon dioxide therapy, III, 25.
- See also Henry, A. W.
- Campbell, J. G. C., preparation of formol toxoid and alum-precipitated toxoid, III, 105.
- Campbell, K. See Bodansky, M., and Holmes, H. N.
- Campbell, K. N., Campbell, (Miss) B. K., and Eby, L. T., substituted acetylenes. XXIX. Preparation of acetylenic carbonyls, II, 46.
- and McKenna, J. F., action of Grignard reagents on oximes. I. Action of magnesium phenyl bromide on mixed ketoximes, II, 366.
- Campbell, M., angina pectoris following a crushing accident, III, 745.
- and Elliott, G. A., paroxysmal tachycardia; aetiology and prognosis of 100 cases, III, 744.
- Campbell, N. See Levy, (Miss) W. J., and Meisenheimer, J.
- Campbell, N. R., Dodds, E. C., and Lawson, W., oestrogenic activity of anol; a highly active phenol isolated from the by-products, III, 264.
- Dodds, E. C., Lawson, W., and Noble, R. L., biological effects of hexoestrol, III, 1053.
- See also Atkinson, J. R.

- Campbell, R. See Griffith, J. Q., jun.
 Campbell, R. K. See Hulgard, E. R.
 Campbell, R. M. See Tombleson, J. B. L.
 Campbell, W. A. See Davidson, R. W.
 Campbell, W. G., Hirst, E. L., and Young, G. T., determination of uronic anhydride residues in polysaccharides, II, 51.
 and McGowan, J. C., colour reactions of lignin and tannins, II, 464.
 McGowan, J. C., and Bryant, S. A., chlorine-sodium sulphite reaction of woody tissues. II. Bearing of the colour reaction on the constitution of hardwood lignin, III, 217.
 Campbell, W. P. See Fieser, L. F.
 Campenhout, E. van, role of ectodermal placodes in goose embryo, III, 643.
 Canaga, B. L., jun. See Scott, G. H.
 Canal, F., important and difficultly-accessible microchemical literature, II, 193.
 Canal, G. See Caujolle, F.
 Canal, H. See Goris, A.
 Canals, E., and Collet, H., Raman spectra of crystalline powders; hydrates, I, 510.
 Candeia, C., and Macovski, Eugen, Schiff bases from 4-amino-*o*-tolunitrile, II, 64.
 Condensation of 4-nitro-*o*-tolunitrile with aromatic aldehydes, II, 424.
 Candella, P. B., blood group determinations on bones of thirty Aleutian mummies, III, 643. Blood-group tests on stains, mummified tissues, and cancellous bone, III, 957.
 Canel, M. See Ullrich, H.
 Canelo, C. K., and Lissar, H., case of arrhenoblastoma simulating Cushing's disease, III, 757.
 Canet, J. See Farinaud, E.
 Canetti, G. See Saenz, A.
 Čanič, Z. See Samec, M.
 Canna, S., experimental anæmias. I. II. Effect of acidic and alkaline diets, III, 447. Muscle fibres of spleen, examined by the Carere-Comes method, in normal and pathological conditions, III, 545.
 Cannavà, A., effect of ingestion of sucrose on diuresis in man, III, 66. Detection of early fluorosis in teeth, III, 155. Alkaline reserve and action of chloral at high altitudes, III, 312. Toxicity of elemental arsenic, III, 616.
 Canneyt, J. van. See Bessemans, A.
 Cannon, M. C. See Titus, A. C.
 Cannon, P. R. See Geiling, E. M. K., and Walsh, T. E.
 Cannon, W. B., and Lissák, K., evidence for adrenaline in adrenergic neurones, III, 833.
 See also Brouha, L., and Rosenblueth, A.
 Canon, O. L. von, diphtheria and tetanus toxoids, III, 1012.
 Cantarow, A., Haury, V. G., and Whitbeck, C. G., effect of parathyroid hormone on diffusion of calcium, magnesium, and phosphorus into the peritoneum. I. and II., III, 41.
 Stewart, H. L., and Morgan, D. R., chronic idiopathic parathyroid tetany, See also Stewart, H. L.
 Cantoni, G., pharmacological action of *Eriophorum alpinum*, L., III, 1003.
 and De Caro, L., antistaphylococcal action of a new derivative of sulph-anilamide, III, 178.
 See also De Caro, L.
 Cantor, S. M. See Hurd, C. D.
 Canzoni, R. See Fuentes, P. V.
 Capani, L., ketones in blood and urine of compensated cardiac patients, III, 298.
 and Manganelli, A., biochemical researches on circulatory compensation, III, 236.
 Capatos, L. See Perakis, N.
 Capdecemme, L., direction of dispersion of anisotropy in opaque minerals, I, 500.
 Capnick, I. See Cope, O.
 Capotummino, G. See Indovina, R.
 Cappelletto, A., respiratory metabolism of the alpine insect *Isoloma saltans*, III, 606.
 Cappelli, P. See Slavich, E.
 Capraro, V., pH of the seminal vesicles content of white rats, III, 53.
 and Fornaroli, P., utilisation of lactic acid in heart-lung preparations, III, 965.
 Capri, A. See Ciaccio, C.
 Capron, P., and De Hemptinne, M., concentration of carbon of at. wt. 13, I, 91.
 See also De Hemptinne, M., and Rajam, J. B. R.
 Capuano, S., 3-diazo-2-phenylindole. IV., II, 125.
 Capucci, F. See Corbellini, A.
 Capuzzi, M. See Butturini, L.
 Caracci, R. See Crippa, G. B.
 Caraffa, C. B. See Luque, O.
 Carandante, G., distribution of potassium in human skin, determined by Carere-Comes' method, III, 394.
 Carayon-Gentil, A., choline and its determination in invertebrates by biological, chemical, and microchemical methods, III, 885.
 and Gautrelet, J., substances preventing the Florence reaction in blood and organ extracts, III, 987.
 See also Corteggiani, E., and Mentzer, M. C.
 Carbenay, F. See Gutton, C.
 Carbery, M., and Chatterjee, I., determination of digestibility coefficients. II. Computation of coefficients from individual tests and the order of precision, III, 282.
 Chatterjee, I., and Talapatra, S. K., mineral requirements of cattle in North East India with special reference to rice straw feeding, III, 398.
 Carbone, J. See Calvin, J. K.
 Carbou, J. See Fleury, P.
 Carbunescu, G., effect of tropine, tropacocaine, and eucaine on the sensitivity of smooth muscle to adrenaline, III, 977.
 See also Bacq, Z. M., and Brull, L.
 Card, T. A., hypertrophic pyloric stenosis in twins, III, 842.
 Cardas, M. See Panlian, D.
 Cardiac Society of Great Britain and Ireland, and Amer. Heart Assoc., measurement of arterial blood pressure, III, 1032.
 Cardin, A., cutaneous, vascular reaction to dog's blood, III, 192. Physiology of diaphragm, III, 824.
 Cardone, E., and Falk, G. K., preparation of refined and concentrated pneumococcus and meningococcus antibacterial sera, III, 429.
 and Mazzarella, R., adsorption of phenol by protein in preparation of certain biological products, III, 337.
 Cardoso, D. M., Reis, J., and Nobuga, P., effect of sulphanilamide on experimental *Pasteurella avicida* infection, III, 927.
 Cardoso, H. T. See Cole, H. I.
 Cardot, H. See Arvanitaki, A.
 Carere-Comes, O., selective histological staining of muscle fibres and red blood corpuscles by virtue of their potassium content, III, 112. Nature and histogenesis of Gamna's sclerosiderotic area of the spleen, III, 545.
 Carey, B. W. See MacLachlan, E. A.
 Carey, E. J., and Zeit, W., micro-incineration of active smooth, transitional, and skeletal muscle, III, 1035.
 Carey, E. L. See Grogberg, B. C.
 Caridroit, F., measurement of androgenic activity, III, 983.
 and Regnier, V., dose of testosterone necessary to maintain comb size in castrated cocks, III, 54.
 Carillo, R., and Oribe, M., leptomeningeal neuroblastoma, III, 670.
 Cario, G., and Stille, U., sodium D-lines in the night sky glow, I, 543.
 Carl, M., McKnight, R. S., Scott, B., and Lindgren, C. C., physiological effects of garlic and derived substances, III, 504.
 Carlberg, J. See Kauko, Y.
 Carlen, S. A., fibrinolytic properties of filtrates of *Clostridium histolyticum* in normal saline and dog serum, III, 874.
 Carleton, A., proprioceptive innervation of the tongue, III, 29. Effect of colchicine on the skin of young rats, III, 545.
 Carleton, B. H., Blair, H. A., and Latchford, W. B., effects of the chlorides of potassium, calcium, and sodium on the α -excitability of muscle, III, 26.
 Carleton, H. M. See Maegraith, B. G.
 Carlin, R. B. See Smith, L. I.
 Carlson, A. See Wood, S. R.
 Carlson, A. J. See Bruner, H. D., and Hoelzel, F.
 Carlson, B. G. See Giordano, A. S.
 Carlson, C. G., and Hultgren, A., radiated crystals in cast stearin, I, 512.
 Carlson, E. J. See Smith, L. I.
 Carlson, G. H. See Michael, A.
 Carlson, W. A., glass-blowing accessories, I, 105.
 Carmichael, E. A., Doupe, J., Harper, A. A., and McSwiney, B. A., vasomotor reflexes in man following duodenal distension, III, 561.
 Carmichael, E. B., thiocyanate as treatment for mange on dogs and other laboratory animals, III, 504.
 and Posey, L. C., impermeability of guinea-pig placenta to ricin, III, 1055.
 Carmichael, H., and Chou, C. N., cosmic-ray ionisation bursts, I, 593.
 and Dymond, E. G., upper air investigations in North-West Greenland, I, 445. High-altitude cosmic radiation measurements near the north geomagnetic pole, I, 445.
 Carmichael, R., and Jeaffreson, B. L., basal cells in epithelium of human cervical canal, III, 979.
 Carmichael, L. See Rawdon-Smith, A. F.
 Carne, H. O. See MacKay, E. M.
 Carne, H. R., bacteriological study of 134 strains of *Corynebacterium ovis*, III, 101.
 Carneiro, P. de B. See under De Berredo Carneiro, P.
 Carnot, P., Cachera, R., and Melik-Ogandjanoff, T., effect of diathermy of the liver on retention of Congo-red in the plasma, III, 234. Effect of hepatic diathermy on elimination of Congo-red, III, 759.

- Carnot, P., and Coquoin-Carnot, M., accelerated healing of experimental gastric ulcers following acenaphthene treatment, III, 985.
- Caro, G. See Bredereck, H.
- Caroli, J., Girard, M., and Lavergne, H., choluria and choluria in experimental occlusion of the small intestine in dogs, III, 63.
- Carolus, R. L., effect of ions, used singly and in combination, on growth and potassium, calcium, and magnesium absorption of bean plants, III, 211.
- Caronna, G., and Sansone, (Signa.) B., behaviour of 8-hydroxyquinoline with diazomethane, II, 281.
- Carpenter, C. M., and Barbour, G. M., effect of neoprontosil on bacterial toxins, III, 1083.
- Hawley, P. L., and Barbour, G. M., protective effect of sulphanilamide in mice against gonococcal "toxin," III, 305.
- Carpenter, C. W., *Pythium* root-rot; absorption of essential elements by segregated roots of sugar cane, III, 1018.
- Carpenter, D. C., splitting proteins by ultraviolet light, I, 426.
- Carpenter, L. G., and Bryant, A. R., high-temperature vacuum calorimeter of the copper block type, I, 432.
- and Steward, C. J., atomic heat of potassium, I, 362.
- Carpenter, L. L. See Potts, W. M.
- Carpenter, P. G. See Friedman, Leo.
- Carpenter, T. M., tables, factors, and formulas for computing respiratory exchange and biological transformations of energy, III, 735.
- Carr, C. J., and Forman, S. E., sugar alcohols. XX. Fate of *d*-sorbitol, styrcitol, and *l*-sorbos in the animal body, III, 709.
- See also Krantz, J. C., jun.
- Carr, (Miss) E. P., and Stücklen, (Miss) H., electronic transition of the Rydberg series type in the absorption spectra of hydrocarbons, I, 548.
- Carr, J. G. See Amies, C. R.
- Carr, J. L., Connor, C. L., and Ginzton, L. L., experiments with cysteine hydrochloride in the treatment of animal tumours, III, 492.
- Carr, W., and Shutt, W. J., dielectric properties and ionisation constants of amino acids, I, 322.
- Carré, P., and Libermann, D., preparation of chemically pure thionyl chloride, I, 274. Sulphurous esters and chlorosulphites, II, 403.
- and Peigné, L., anti-oxygen effects from the point of view of the electron ratio rule, I, 206.
- Carrelli, A., total and partial emissive power of some substances. I. and II., I, 557.
- Carné, C., treatment of X-radiation leucopenia, III, 114.
- Carrière, E., and Lasri, (Mlle.) R., precipitation of barium molybdates as a function of $\mu\eta$, I, 92.
- Carrière, G., polarographic examination of the adsorption of cations by proteins, I, 562.
- Morel, J., and Gineste, P. J., histological changes in thymus and thyroid following testosterone treatment, III, 137. Effect of anterior pituitary extract on morphology of thymus in thyroidectomised rats, III, 137. Parathyroid mitoses with large doses of vitamin-D, III, 909.
- Carritt, D. E. See Parks, W. G.
- Carroll, J. E., true auricular fibrillation compared with muscle tremors of poliomyelitis, III, 122.
- Carroll, K. G. See Margenau, H., and Tyrrell, W. A., jun.
- Carroll, O., and Lewis, B., mandelic acid: therapeutic value, III, 307.
- Carroll, R., and Spoerri, P. E., synthesis of α -di-3:4-dimethoxyphenylbutan- β -one (veratryl homoveratryl ketone), II, 23.
- Carruthers, C., vitamin-E and experimental tumours, III, 697. Attempt to produce sarcomas in rats from ingestion of crude wheat-germ oil by ether extraction, III, 846.
- Carrier, H. M., and Ivy, A. C., excretion of sulphanilamide by the digestive glands, III, 858.
- Carslaw, H. S., and Jaeger, J. C., conduction of heat, I, 515.
- Carstens, H. P. See Krehbiel, R. H.
- Carswell, T. S., Nason, H. K., and Fleming, J. D., bacterial control in air conditioning, III, 94.
- Cartan, L., positive rays and their application in mass spectrography, I, 3.
- Carter, A. G., Bosanquet, P. A., Silcocks, C. G., Travers, M. W., and Wilshire, A. F., kinetics of thermal decomposition of methylamines, I, 326.
- Carter, C. G. See Whitehead, W. M.
- Carter, F. D., Copp, F. C., Rao, B. S., Simonsen, J. L., and Subramaniam, K. S., constituents of Indian essential oils. XXVI. Structures of *l*- α - and β -cureumenes, II, 516.
- Carter, G. P., and Gillam, A. E., isomerisation of carotenes. III. Change of β -carotene into ψ - α -carotene, II, 473.
- Carter, H. E., Handler, P., and Melville, D. B., azlactones. I. Preparation of α -benzamidoacetic acid azlactone and the conversion of *allo*threonine into threonine, II, 423.
- Carter, M. G. R., and Malkin, T. X-ray and thermal examination of the glycerides. V. Unsymmetrical mixed triglycerides, $\text{COR}\cdot\text{O}\cdot\text{CH}_2\cdot\text{CH}(\text{O}\cdot\text{COR})\cdot\text{CH}_2(\text{O}\cdot\text{COR})$. VII. Unsymmetrical mixed triglycerides, $\text{COR}\cdot\text{O}\cdot\text{CH}_2\cdot\text{CH}(\text{O}\cdot\text{COR})\cdot\text{CH}_2\cdot\text{O}\cdot\text{COR}$, II, 240, 531.
- Carter, R. O., and Hall, J. L., physical characterisation of calf thymus nucleohistone, III, 1061.
- Carter, S. R., and Record, B. R., osmotic pressure of solutions of polysaccharide derivatives. I. New form of osmometer. II. Osmotic pressure of derivatives of lichenin, inulin, glycogen, starch, and starch dextrin, I, 318.
- Cartland, G. F. See Kuizenga, M. H.
- Cartwright, C. H. See Stockbarger, D. C.
- Cartwright, F. F., ether convulsions, III, 87. Divinyl ether anaesthesia, III, 778.
- Carvalho, A., and Vidal, C., effect of ascorbic acid on development of Koch's bacillus in liquid cultures, III, 331.
- Cary, M. K. See Apperly, F. L.
- Casanova, J. See Mercier, F.
- Case, F. H., mono- and di-bromination of heteronuclear-substituted 4-acetamidodiphenyls, II, 266.
- Casey, A. E., comparison of effect of homologous tumour material and Duran-Reynolds factor on tumour growth, III, 698.
- Casey, A. E., distribution of metastases in the Brown-Pearce tumour. I. Standard breeds of rabbits. II. Effect of fifteen years' transplantation. III. Effect of homologous material, III, 991.
- and Broun, G. O., epidemiology of Saint Louis encephalitis, III, 335.
- and Pearson, B., distribution of metastases in the Brown-Pearce tumour. IV. Effects of site of inoculation. V. Comparison with tumours in man, III, 991.
- Cash, P. T. See Ziegler, L. H.
- Cashman, R. J., contact difference in potential between barium and magnesium, I, 60.
- and Bassoe, E., surface and volume photo-electric emissions from barium, I, 168.
- Casimir, H. B. G., equilibrium between spin and lattice, I, 187.
- De Haas, W. J., and De Klerk, D., measurements on iron ammonium alum, I, 247. Determining specific heats at extremely low temperatures, I, 280. Adiabatic demagnetisation of potassium chromic alum, I, 310.
- Caskey, C. D., Gallup, W. D., and Norris, L. C., need of manganese in bone development of chicks, III, 1067.
- and Norris, L. C., relative effectiveness of ingested and injected manganese in preventing perosis, III, 1067.
- Cason, J., and Anderson, R. J., lipins of tubercle bacilli. LVI. Wax of the bovine tubercle bacillus, II, 48.
- See also Fieser, L. F.
- Caspar, E. See Ruggli, P.
- Casparis, P., and Freund, W., new hydrocarbon from juniper oil, II, 147.
- Caspe, S., and Hadjopoulos, L. G., lecithin soap. II. Effect of lecithin soap on vitamin-A, III, 399.
- Caspersson, T., chemical composition of structures in the cell nucleus, III, 113.
- and Schultz, J., pentose nucleotides in cytoplasm of growing tissues, III, 733.
- Cass, J. M., ultimate prognosis of nephritis in childhood: incidence of anaemia in various stages of the disease, III, 760.
- Cass, W. E. See Renshaw, R. R.
- Cassaday, J. T., and Bogert, M. T., synthesis of 6:7-dihydroxy-1:4-dimethylphenanthrene from *p*-xylylacetic acid and 6-nitroveratraldehyde by the Pschorr reaction, II, 503.
- Cassagne, H., extraction of diphtheria bacilli of various ages by acetone, III, 1012.
- Cassel, H. M., and Miles, G. D., movement of water from concentrated to dilute solutions through liquid membranes, I, 196, 257.
- Cassells, D. A. K., red cell fragility in various blood conditions, III, 8.
- Cassidy, H. G., adsorption analysis: Tswett's chromatographic method, I, 341. Reductor tubes of rugged design, I, 582.
- Cassil, C. C., and Wichmann, H. J., rapid volumetric micro-method for determining arsenic, I, 534.
- Castagne, E., leguminous insecticides of the Belgian Congo, II, 386.
- Castanet, P. See Jeanneney, G.
- Castel, P., preparation of acid thorium orthoarsenates, I, 210. Trithoric orthophosphate, I, 210.

- Castellanos, A., Pereiras, R., and Garcia, A., angiocardiology in infants and children, III, 123.
- Castellar, H. S., Neuberg's [fermentation] scheme, III, 872.
- Castelli, V. See Dhéré, C.
- Castelli-Borgiotti, G. See Di Giorgio, A. M.
- Castelluccio, D., electronic theory of electrical equilibrium of metallic conductors, I, 309.
- Castelnuovo, G., effect of sexual hormones on maturation of the carp, III, 142.
- Castex, M. R., Patalano, A., and Gorodner, A., nitrogenous constituents of plasma in malignant hypertension, III, 365.
- Castiglioni, A., crystallisation of salicylic acid from mixtures of salicylic acid and α -naphthol, I, 566. Detection of carbon disulphide, II, 235. Determination of piperazine, II, 398. Determination of 8-hydroxyquinoline in presence of sulphosalicylic acid, II, 528.
- Castleman, B., and Hertz, S., pituitary fibrosis with myxodema, III, 378.
- See also Drake, T. G., and Palmer, R. S.
- Castrovilli, G., and Iberti, U., blood gases in acute carbon monoxide poisoning, III, 564.
- Cataldi, G. M. See Macchia, E.
- Cate, B. ten. See Cate, J. ten.
- Cate, J. ten., and Cate, B. ten., can *Octopus vulgaris* distinguish different shapes? III, 468.
- Catel, W., metabolism of infants fed with boiled or unboiled human milk, III, 282. Changes in human milk after keeping and boiling, III, 599.
- Cates, H. B., and Giovanaszai, J. G., effect of smoking on blood-sugar and peripheral temperature of convalescents, III, 935.
- Cathala, J., and Cluzel, J., spectrophotometric study of hydrolysis of ferric salts, I, 85, 205, 471.
- Cathcart, (Miss) E. B. See Sloane, R. H.
- Catheart, E. P., feet of industrial worker, III, 619.
- Cathie, I. A. B., inorganic nuclear content as an index of tumour radio-sensitivity, III, 420.
- Cator, G. See Jeanneney, G.
- Cattadori, L. See Illari, G.
- Cattaneo, C. See Bassani, B., and Besta, B.
- Cattaneo, P., Deulofeu, V., and Guerrero, T. H., amino-acids. XI. Condensation of creatinine with aromatic aldehydes, II, 450.
- Cattelain, E., derivatives of β -*p*-anisyl- β -methylpyruvic [α -keto- β -*p*-anisyl-butyric] acid, II, 23. Diketotriazine ethers, II, 390. Sulphoxytriazine [5-keto-3-thion-2:3:4:5-tetrahydro-1:2:4-triazine] ethers, II, 452.
- and Chabrier, P., use of Raney's alloy in place of Devarda's alloy, I, 96.
- See also Bougault, J.
- Cattell, McK., and Givin, H., influence of asphyxia and other factors on the serum-potassium of cats, III, 233.
- Cattermole, (Miss) J. See Wilson, W.
- Catz, J., effect of ascorbic acid on growth of anaerobic bacteria, III, 633. Inactivation of the toxin of *B. adematensis* by ascorbic acid, III, 944.
- Cauchois, (Mlle.) Y. See Hulubei, H.
- Cauchois, J. See Binet, L., and Moricard, R.
- Cauer, H., chemical and bioclimatic studies in Brittany. II. Effect of air-borne iodine from Brittany on the iodine supply of central Europe, III, 66.
- See also Quitmann, E.
- Caughey, J. E. See Roche, E. H.
- Caujolle, F., thermal decomposition of nickel and cobalt formates, II, 138. Comparative toxicity of cobalt and nickel, III, 616.
- and Canal, G., toxicology of nickel, III, 616.
- Caulfield, A. H. W., specific diagnosis and treatment of poison ivy (*Rhus toxicodendron*) dermatitis, III, 93.
- Cauquil, (Mlle.) G., action of selenium dioxide on pulegone, II, 269. Two isomeric 2-acetyldecahydronaphthalenes, II, 508.
- See also Godchot, M.
- Caussade, M. G., circulation in the adrenals, III, 42.
- Caussé, R. See Baudouin, A.
- Caux, M. See Cordier, D.
- Cavallaro, L., physico-chemical basis of short-wave therapy, III, 937.
- Cavalli, F., comparative toxicities of tri- and hexa-valent chromium, III, 1003.
- and Gessaga, V., toxicity and elimination of chromium salts, III, 934.
- See also Rabbano, A.
- Cavallito, C. J. See Smith, C. S.
- Cavanagh, B., and Raper, H. S., deuterium as indicator in the study of the passage of the fatty acids of food into body-lipins and glycerides, III, 298.
- Cavassilas, D. See Arnulf, A.
- Cave, H. W. See Whitnah, C. H.
- Cavett, J. W., and Foster, W. C., formation of ammonia by the kidney, III, 275.
- Cavier, R. See Vallette, G.
- Cavinato, A., identity between the Laue equation and the Bragg relation, I, 406, 553.
- Cawley, C. M. See Hall, C. C.
- Cawston, F. G., dentition of sharks, III, 278.
- Cawthorne, T., and Fawcett, M. N., fluid balance in Meniere's disease, III, 135.
- Cayeux, L., dolomites and flints in the phosphatic shale formation of the Hodna (Constantine), I, 436. Relations between the constitutions of grain phosphates and the composition of the sterile deposits to which they are subordinate, I, 587.
- Cayla, J. See De Kerleau, J. C.
- Cayrol, P. See Genevois, L.
- Cazalas, A. See Worms, G.
- Cech, V., and Kámen, K., colorimetric determination of small amounts of 2:4'-diaminodiphenyl in presence of benzidine, II, 236.
- Cecil, R. L., serum therapy in pneumonia, III, 988.
- Cedrangolo, F., effect of cysteine-ferrous iron and cystine-ferrous iron systems on the hydrolytic and synthetic activities of pancreatic esterase, III, 196. Alkaline phosphatase, III, 723. Bergmann's views on structure of proteins, III, 988.
- and Baccari, F., phospholipins of liver and choline, III, 594.
- and Del Regno, F., effect of enzymes on $\alpha\alpha$ - and $\alpha\beta$ -diolein, III, 322. Alkaline phosphatase, III, 520.
- See also Quagliariniello, G.
- Cefola, M. See Benedetti-Pichler, A. A.
- Celan, M., synapses in red algae, III, 439.
- Cennamo, F., behaviour of Raman bands of water in solutions of some sulphates, I, 510. Total thermal emission of nickel, I, 557.
- Centnerszwer, M., thermal dissociation of nitrates in the light of the phase rule, I, 263. B.p. depression by non-volatile substances in ternary systems. IV. Properties of "isoeonic" solutions, I, 323.
- and Heller, W. [with Braude, J.], velocity of solution of copper in nitric acid, I, 270.
- and Kozuchowski, Z., action of nitrogen on water vapour in the electric arc, I, 152.
- and Ładzińska, H., b.p. depression by non-volatile substances in ternary systems. II. Behaviour of concentrated solutions of cobaltous chloride and sodium nitrate in water, I, 323.
- and Szedrowicz, J., titration of manganates in presence of permanganates, I, 40.
- and Żolatkowska, (Mlle.) K., b.p. depression by non-volatile substances in ternary systems. III. Concentrated solutions of calcium nitrate in water, I, 323.
- Centolella, A. P. See Blicke, F. F.
- Cera, B. See Lombroso, C., and Rothschild, G.
- Cerecedo, L. R. See Hennessy, D. J.
- Cerkovnikov, E. See Prelog, V.
- Černák, V. See Dubsky, J. V.
- Cernuschi, F., equilibrium pressure of a vapour in presence of the corresponding solid, I, 371. Supernovæ and the neutron-core stars, I, 506. Origin of cosmic rays, I, 506. Behaviour of matter at extremely high temperatures and pressures, I, 595.
- and Eyring, H., elementary theory of condensation, I, 461.
- Cesari, E., and Boquet, P., mechanism of detoxication of the venom of *Vipera aspis* by formaldehyde, III, 616.
- Cestari, A., effect of coagulability of the blood on permeability of the pulmonary alveoli and on permanence of colloids in the circulation, III, 20. Coagulability of blood and permanency in circulation of pharmaceutical substances; graphical recording of coagulability, III, 117. Chemistry, pharmacology, and chemotherapy of thiazyl substances. II. Thiocarmine, III, 179.
- Chabrier, P. See Bougault, J., and Cattelain, E.
- Chabrol, E., Cottet, J., and Sallet, J., visceral partition of injected sulphonamide compounds, III, 999.
- Chace, A. M. See Kersten, H.
- Chace, F. A., jun. See Welsh, J. H.
- Chace, R. R. See Ronchese, F.
- Chaddock, R. E. See Baker, E. M.
- Chadwick, C. S. See Reinke, E. E.
- Chadwick, T. C. See Palkin, S.
- Chai, T. Y. See Shih, J. W.
- Chaikina, B. I. See Epelbaum, S. E.
- Chaikoff, I. L. See Changus, G. W., Connor, C. L., Entenman, C., Jones, H. B., Lorenz, F. W., Montgomery, M. L., and Perlman, I.
- Chain, E., inhibition of dehydrogenases by snake venom, III, 623.
- See also Berenblum, I., Duthie, E. S., Goodfriend, J., and Heatley, N. G.

- Chaix, P., and Fromageot, C., effect of thiol group on fermentation and respiration of propionic bacteria in presence of glucose; suppression of the Pasteur effect, III, 725.
See also Leon, T. J.
- Chajes, B., Bayer 205 in the treatment of lupus erythematosus, III, 179.
- Chakrabarty, N. K. See Mitra, S.
- Chakravarti, A. S., and Prasad, B., viscosity and density of cadmium chloride solutions at 35°, I, 68.
- Chakravarti, D., and Chakravarty, N., constitution of halogenated resacetone and propiophenones, II, 323.
and Majumdar, B., limited applicability of Kostanecki's reaction; influence of halogen atoms on the reaction, II, 335.
- Chakravarty, M. See Chopra, R. N.
- Chakravarty, M. K., hydrogenation of nickel carbonyl, I, 529.
- Chakravarty, N. See Chakravarti, D.
- Chakravarty, S. K., quantisation under two centres of forces. I. The H⁺ ion, I, 594.
- Chaletzka, F. See Bauer, E. S.
- Chalian, W. See Abel, J. J.
- Chalier, J., and Jeune, M., attempt at immunisation of guinea-pigs against diphtheria by vitamin-A, III, 285.
Experimental hypervitaminosis-A in guinea-pigs, III, 285.
- Jeune, M., Simon, F., and Alacoque, P., relationship between vitamin-A and blood-cholesterol, III, 285.
- Chalklin, F. G., Watts, S. S., and Hillson, S. P., concave-grating vacuum spectrograph for wave-lengths 15—1000 Å., I, 43.
- Challenger, F., and Miller, S. A., self-condensation of ethyl methylenebis-thioacetate; new method for the preparation of derivatives of 1:3-dithian, II, 176.
Mercuration of thionaphthen, II, 397.
See also Bird, M. L., and Blackburn, S.
- Chalmers, J. A., calculation of the Peltier effect, I, 514.
- Chalmers, J. N. M. See Tompsett, S. L.
- Chalonge, D. See Barbier, D.
- Chamberlain, E. N., and Hay, J. D., normal electrocardiogram, III, 744.
- Chamberlain, W. E., pineal gland, III, 683.
- Chambers, E. L. See Johnson, F. H.
- Chambers, H. H., measurement of adsorption of gases and vapours on solids, I, 139.
- Chambers, L. A. See Bateman, J. B., Flösdorf, E. W., and Henle, W.
- Chambers, R., structural and kinetic aspects of cell division, III, 348.
and Grand, C. G., effect of carbohydrate on accumulation of granulocytes in various mouse tumours, III, 990.
See also Cameron, G.
- Chambers, W. H. See Larson, H. W., and Lichtman, A. L.
- Chambers, W. P. See Savage, R. M.
- Chambon, M., Pontius' chlorometric method, I, 37, 156. Experiments in atmospheres containing low concentrations of toxic gases, III, 440.
- Chamié, (Mlle.) C., atom groups in radio-colloids, I, 319.
- Chaminade, R., and Boucher, J., effect of artificial light on the flowering of plants, III, 1017.
- Chamorro, A., pituitary extract having synergistic action with prolactin, III, 973.
Paradoxical effects of mixtures of prolactin and anterior pituitary synergist, III, 973.
Synergic and antagonistic effects of anterior pituitary extracts on prolactin, III, 973.
- Champetier, G., and Fauré-Fremiet, E., roentgenographic study of secreted keratin, III, 279.
- Champion, F. C., and Barber, A., elastic scattering of fast β -particles by atomic nuclei, I, 170.
See also Barber, A.
- Champion, P. K., and Tessitore, N. J., intraligamentary pregnancy, III, 382.
- Champy, C., interactions of hypophysis and gonads on plumage, III, 1054.
- Coujard, R., and Coujard-Champy, C., hormonal determinism of sexual swelling in the frog's thumb, III, 589.
- Heitz-Boyer, and Coujard, R., mechanism of action of male hormones on prostatic hypertrophy, III, 51.
- Wolff, R., and Coujard-Champy, C., effect of prolactin on interstitial cells of testes, III, 1047.
- Chamraeff. See Grimberg, A.
- Chandelle, R., gravimetric determination of zirconium by means of sodium *p*-aminophenylarsinate (atoxyl), I, 279.
- Chandlee, G. C. See Simpson, C. T., and Weidner, B. V.
- Chandler, C. A., and Janeway, C. A., mode of action of sulphanilamide *in vitro*, III, 927.
- Chandler, E. B., apparatus for spectrographic analysis, I, 103. Hydrogen sulphide generator, I, 223.
- Chandra, S. N. See Greval, S. D. S.
- Chang, C. Y., effect of vegetarian diet on rate of respiration of rat organs, III, 849. Mineral contents of Chinese foods, III, 849.
- Chang, H. C., Chia, K. F., Huang, J. J., and Lim, R. K. S., vagus-post-pituitary reflex. VIII. Antidiuretic effect, III, 901.
- Hsieh, W. M., Lee, L. Y., Li, T. H., and Lim, R. K. S., acetylcholine content of various nerve trunks and its synthesis *in vitro*, III, 665.
- Hsieh, W. M., Li, T. H., and Lim, R. K. S., liberation of acetylcholine from nerve trunks during stimulation, III, 665.
- Hsieh, W. M., and Lu, Y. M., light-pituitary reflex and adrenergic-cholinergic sympathetic nerve in a teleost, III, 999.
- Huang, J. J., Lim, R. K. S., and Wang, K. J., vagus-post-pituitary reflex. VI. Phenomena of exhaustion and recuperation, III, 907.
- Lim, R. K. S., Lü, Y. M., Wang, C. C., and Wang, K. J., vagus-post-pituitary reflex. III. Oxytocic component, III, 48.
- Chang, I., effect of asphyxia on the adenosine triphosphate content of the rabbit's heart, III, 122. Action of iodoacetate and fluoride on isolated rabbit's auricle, III, 359.
- Chang, K. P. See Chu, H. I.
- Chang, K. T. See Chuang, C. K.
- Chang, L. H. See Sah, P. P. T.
- Chang, T. C., standard slide for qualitative spectrochemical analysis, I, 491.
- Chang, T. L., compounds of zinc salts with quinoline, I, 380.
- Chang, T. S., superlattice formation of the type AB in an adsorbed layer, I, 195. Statistical theory of adsorption of double molecules, I, 315.
- Changus, G. W., Chaikoff, I. L., and Ruben, S., radioactive phosphorus as indicator of phospholipid metabolism. IV. Phospholipid metabolism of the brain, III, 297.
- Chanova, I. I. See Aivazov, B. V.
- Chanoz, M., Florence, G., and Perrottet, P., calomel electrode; Gouy's formula; diffusion potentials, I, 373.
- Chanton, L. R., oestrogen in birds' feathers, III, 479.
- Chao, I., Chiao, S. T., and Chi, C. C., osmotic properties of isolated amphibian skeletal muscle. II. Role of tissue spaces in osmotic equilibrium, III, 126.
- Chao, K. T. See Duffendack, O. S., and Oleson, N. L.
- Chao, S. H., Smare, D. L., and Taylor, W. H., X-ray examination of potash-soda feldspars, I, 436.
and Taylor, W. H., lamellar structure of potash-soda feldspars, I, 496.
- Chao, T. P., systematic analysis of the common anions, I, 577.
- Chao, W. H. See Lyman, R. S.
- Chaplin, H. O., and Hunter, L., associating effect of the hydrogen atom. IV. Salicyl- and acetoacet-anilides, II, 214.
- Chapman, A. W., treatment of the bacteræmia of post-scarlatinal nephritis with prontosil and proutylin, III, 81.
- Chapman, C. A., geology of the Mascota Quadrangle, New Hampshire, I, 588.
- Chapman, E. M., Dill, D. B., and Graybiel, A., decrease in functional capacity of lungs and heart resulting from deformities of chest: pulmonocardiac failure, III, 824.
- Chapman, E. P., newly-recognised features of mineral paragenesis at Leadville, Colorado, I, 585.
- Chapman, G. H., and Berens, C., comparison of intradermal tests with agglutinability and *in vitro* tests of various organisms isolated in chronic infections, III, 531.
Stiles, M. H., and Berens, C., isolation and *in vitro* testing of pathogenic types of non-exotoxic streptococci, III, 430.
- Chapman, S. S. See Hammett, F. S.
- Chappell, W. See Davidson, A. W.
- Chapple, C. C., and Kenney, A. S., limitation of bacterial contamination of air by a new automatic incubator for infants, III, 1094.
- Charaux, C. See Collot, A. M.
- Chardon, G. See Tourmade, A.
- Chardonnens, L., and Venetz, J., functional aptitude of the methyl group. II. Derivatives of benzophenone and benzil. III. Derivatives of diphenyl sulphone. IV. Derivatives of acetophenone and chalcone, II, 419, 428, 550.
- Chargaff, E., unstable isotopes. I. Determination of radioactive isotopes in organic material. II. Relative speed of formation of lecithin and cephalin in the body, III, 351, 707. Chemistry of bacteria. XI. Configuration of glutamic and aspartic acids from pathogenic bacteria (*Phytomonas tumefaciens* and *Corynebacterium diphtheriae*), III, 1015. Spleen in a case of Niemann-Pick disease, III, 1061.
and Cohen, S. S., lysophosphatides, III, 917.
- Chargin, L., Leifer, W., and Rosenthal, T., mapharsen in treatment of early syphilis, III, 1088.
See also Hyman, H. T.
- Charipper, H. A. See Grosman, A. M., and Poris, E. G.
- Charlesby, A., Finch, G. I., and Wilman, H., diffraction of electrons by anthracene, I, 307.

- Charlesworth, G., and Long, F. A., magnetic properties of ferric oxide at low temperatures, I, 247.
- Charlier, R., toxicity of benzene, III, 510. Caffeine, theobromine, and theophylline as cardiac tonics, III, 931.
- and Angenot, P., comparison of effects of pure and commercial benzene on vasomotor system, III, 934.
- See also Dautrebande, L., and Dumoulin, E.
- Charlot, G., ferrous dimethylglyoxime oxidation-reduction indicator in the titration of hypsulphites with ferricyanide, I, 429. Detection and determination of small amounts of cerium with ferrous *o*-phenanthroline, I, 431. Oxidation-reduction indicators, I, 432. Titration of sulphides with potassium ferricyanide: (1) potentiometrically; (2) using ferrous dimethylglyoxime as redox indicator, I, 577.
- See also Emschwiller, G.
- Charlton, A. L. See Singer, G.
- Charola, F., spectrum analysis of the water supply of Bell Ville (Cordoba, Argentina); determination of vanadium, I, 495.
- Charr, R. See Cohen, A. C.
- Charrier, G., oxidative degradation of mesobenzanthrone and of its substitution derivatives, II, 74.
- and Jorio, M., dehydrogenation of pyridium and of neotropine: 8-substituted 6-amino-2,3-pyridino-7,8:9-triazoles, II, 89.
- Charrin, V., earths of Salinellas, I, 47. Hydrated aluminosilicates, I, 587.
- Chase, H. F., Yonkman, F. F., and Young, A. G., effect of yohimbine derivatives on arterial strips, III, 929.
- Chase, M. W. See Landsteiner, K.
- Chase, R. E., and De Garis, C. F., arteriae coronariae (cordis) in the higher primates, III, 541. Anomalies of venae cavae superiores in an orang, III, 642.
- Chasis, H. See Smith, H. W.
- Chassagnette, C. See Aubertin, E.
- Chateelain, P. See Wyart, J.
- Chatelet, M., and Jouan, R., kinetics of oxidation of cobalt[ous salt solutions], I, 569.
- Chattfield, R. F., determination of the barbiturates, II, 528.
- Chatt, J., and Mann, F. G., constitution of complex metallic salts. VIII. Bridged thio-derivatives of palladous halides with tertiary phosphorus. X. Further evidence for the structure of bridged dipalladium derivatives, I, 61; II, 536. Synthesis of ditertiary arsines; *meso*- and racemic forms of bis-4-covalent-arsenic compounds, II, 292.
- Mann, F. G., and Wells, A. F., constitution of complex metallic salts. IX. Oxalate radical as a "bridging group" between metallic atoms; structure and reactions of dichlorobis-tri-*n*-butylphosphine- μ -oxalatodipalladium, I, 61.
- Chatterjee, B. See Carbery, M.
- Chatterjee, I., and Talapatra, S. K., lime and phosphorus requirement of Bengal cattle, III, 162.
- Chatterjee, Narayanachandra, fluorescence spectra of the rare earths in synthetic fluorites and their explanation, I, 451.
- Chatterjee, Nripendranath, and Barpujari, G. N., *spiro*-compounds. V. Formation and transformation of *spiro*-compounds from 3- and 2-methylcyclohexanones, II, 269.
- Chatterjee, R., oxamidedioxime. I. Determination of nickel, I, 219.
- Chatterjee, R. G. See Chopra, R. N.
- Chatterji, U. N., effect of alcohol on respiratory rate of leaves, III, 108.
- Chattopadhyay, G. C. See Roy, S. K.
- Chattopadhyay, K. P., nasion in living, III, 1023.
- Chauchard, A., Chauchard, B., and Chauchard, P., central and peripheral nerve excitability in chloralosed dog, III, 1035.
- Chauchard, B. See Chauchard, A.
- Chauchard, J. See Chauchard, P.
- Chauchard, P., chronaximetric analysis of nerve block; paralysing heterochronism, III, 369. Mechanism of precocious nerve block in the synapses following preganglionic nerve section, III, 472. Nerve block and subordination in cervical sympathetic in rabbit, III, 969.
- and Chauchard, J., relation between central and peripheral motor excitability during narcosis in frog, III, 901.
- See also Chauchard, A.
- Chaudet, A., rapid qualitative analysis of silicates, I, 385.
- Chaudhury, S. G., and Indra, M. K., theories of adsorption indicators, I, 335.
- Chaudron, G., and Michel, A., thermomagnetic properties of cubic ferric oxide, I, 188.
- See also Bénard, J.
- Chaussé, C., radiography of the petrous bone, III, 641.
- Chaussin, J., and Lescœur, L., physicochemical study of the urine of a diabetic in periods during 24 hours, III, 276. Variations in the phthalein and formol acidity in the 24-hour urine of eight diabetics; decrease in formol acidity, III, 392.
- See also Belluc, S.
- Chaustova, I. M. See Markovitsch, A. V.
- Chauvenet, R., compounds of beryllium nitrate and the alkali nitrates, I, 143. Compounds of zinc nitrate and alkali nitrates, I, 154.
- Chauvin, R., respiration of crickets, III, 23. Reddening of the migratory locust, III, 156. Effect of diet on the gregarious pilgrim cricket, III, 992.
- Chavez, J., and Mendez, L., significance of a large Q wave in coronary disease, III, 237.
- Chawarby, M. See Vassiliadis, P. C.
- Chazanova, N. E. See Kritschewski, I. R.
- Chédin, J., structure of nitric acid and methyl nitrate, I, 550.
- See also Desmaronx, J.
- Cheesman, D. F., destruction of dilute oil hydrosols in volumetric analysis, I, 383.
- Cheldelin, V. H. See Christensen, B. E.
- Chemerdza, J. M. See Bachmann, W. E.
- Chen, A. L., and Chen, K. K., harmine, alkaloid of caapi [*Banisteria caapi*], III, 639.
- Chen, C. Y., treatment of burns, III, 1000.
- Chen, G., and Van Dyke, H. B., gonadotropic action of anterior pituitary extract after tryptic digestion, III, 906.
- See also Van Dyke, H. B.
- Chen, H. K., production of growth-substance by clover nodule bacteria, III, 328.
- Chen, J. S. See Van Dyke, H. B.
- Chen, K. K., and Rose, C. L., small animal holders for intravenous injection, III, 639.
- See also Chen, A. L., and Powell, Horace M.
- Chen, M. C. See Wan, S. W.
- Chen, T. T. See Lee, K. H.
- Chen, Y. H. See Chi, F.
- Chène, M., separation of the two phosphides of vanadium by electrolysis of fused mixtures, I, 329.
- Cheney, G., liver extract in ulcerative colitis, III, 758. Intramuscular injection of vitamin-K [on blood clotting], III, 770.
- Cheney, L. C., amino- and hydroxy-derivatives of dibenzfuran, II, 275.
- See also Binkley, S. B., Gilman, H., McCorquodale, D. W., and Thayer, S. A.
- Cheney, L. L. See Long, A. P.
- Cheney, R. H., effects of caffeine on activity of longitudinal muscle of small intestine, III, 842.
- Cheng, L. T., and Tao, H., nutritional value of whole wheat and whole rice in regard to growth, and the haemoglobin, calcium, and inorganic phosphorus of serum and bone in albino rats, III, 282.
- Cheng, P. Y. See Sah, P. P. T.
- Cherbuliez, E., and Jeannerat, J., casein. III. Fractionation of casein and paracasein by ammonium chloride. IV. Hammarsten's proteose is not a degradation product of casein, II, 461.
- Jeannerat, J., and Meyer, K. H., [conversion of] collagen and related substances [into gelatin], III, 96.
- Cheronis, N. D., use of semi-micro-technique in organic chemistry, II, 192. Laboratory experiments in organic chemistry, II, 399.
- Cherry, I. S., and Crandall, L. A., *jun.*, absence of a significant glucose-lactic acid cycle (involving the liver) in normal unanæsthetised dogs, III, 709.
- See also Crandall, L. A., *jun.*
- Cherry, T. H., and Bernstein, M. J., extraction of oestrogenic substances from human urine for bioassay, III, 1052.
- Chesley, F. F. See Crandall, L. A., *jun.*, and Robinson, H. E.
- Chesley, L. C., Markowitz, I., and Wetchler, B. B., proteinuria following momentary [renal] vascular constriction, III, 391.
- and Vann, F. H., effect of sodium lactate on CO₂-combining power in toxemias of pregnancy, III, 382.
- Chessa, F., localised haemolysis, III, 449.
- See also Manai, A.
- Chester, K. S., identifying plant viruses in the field, III, 208. Serological studies of plant viruses, III, 208.
- Chester, T., air conditioning factors, III, 94.
- Chevallard, F. See Corbellini, A.
- Chevallier, A., Cornil, L., and Verdollin, J., detection of oestrogenic hormone in urine of pregnant women by the spectrophotometric method, III, 1055.
- Dubouloz, P., and Matheron, R., determination of vitamin-A in the alcoholic form, III, 919.
- Giraud, P., and Dinard, C., comparative vitamin-A contents of blood and milk, III, 918. Vitamin-A content of human milk, III, 918.

- Chevallier, A., and Manuel, S., urinary excretion of vitamin-A, III, 163. Determination of vitamin-A in milk, III, 601.
- and Roux, H., measurement of threshold sensitivity of retina, III, 972.
- Chevallier, R. J. See Messimy, R.
- Chevillard, L., Gasnier, A., and Mayer, A., modality of voluntary ingestion in rabbits, III, 1065.
- and Mayer, A., variation of hepatic weight and composition in fasting rabbits; effect of fasting, previous feeding, and external temperature, III, 1059. Variations of hepatic weight and composition in rabbits; effect of exposure to prolonged heat loss, III, 1059. Liver-weight in rabbits and its response to variations in metabolism, III, 1059.
- Chèvremont, M., and Comhaire, S., effect of thyroxine on dialysable lactoflavin of guinea-pig liver, III, 975. Effect of cyclopentylidinitrophenol on vitamin-B₆ content of organs of the guinea-pig, III, 993.
- See also Thomas, J. A.
- Cheymol, J. See Hazard, R.
- Chi, C. C. See Chao, I.
- Chi, Y. F., synthesis of 2-n-butyl- α -naphthol, II, 502.
- and Chen, Y. H., pyrimidines; molecular rearrangement of 2-chloro-6-thiocyanopyrimidine to the [thio]carbimide, II, 229.
- Lee, S. T., and Lee, C. S., alkaloids of twan chan tsao found in Kwangsi, III, 639.
- Leung, C. C., and Yu, W. Y., synthesis of ethyl α -benzoylpropionate, II, 216.
- Chi Ping, functions of mammalian cerebral cortex, III, 247.
- Chia, K. F. See Chang, H. C.
- Chiao, S. H. See Sah, P. P. T.
- Chiao, S. T. See Chao, I.
- Chiatellino, A. See Neri, V.
- Chichester, D. F., Russell, W. C., and Hudson, C. B., mortality in poultry flocks and the vitamin-A content of livers of pullets and hens, III, 601.
- Chick, H., nutritive value of milk, III, 700.
- Macrae, F., Martin, A. J. P., and Martin, C. J., water-soluble B-vitamins other than aneurin, riboflavin, and nicotinic acid required by the pig, III, 166.
- Chikamori, T. See Fukui, G.
- Chikamutsi, H. See Tsuji, S.
- Child, I. L., and Wendt, G. R., temporal course of the influence of visual stimulation on the auditory threshold, III, 134.
- Childers, N. F., influence of nutrients on the photosynthetic activity of apple leaves, III, 800.
- Childs, W. H. J., and Jahn, H. A., spectrum of deuteromethane in the photographic infra-red. I. Preparation of the gas, and measurements of a simple band at 9021 cm.⁻¹, I, 239. New Coriolis perturbation in the methane spectrum. III. Intensities and optical spectrum, I, 300.
- Chiliman, M. See Paulian, D.
- Chimani, F., action of vitamin-C in chronic otitis media, III, 904.
- Ch'in, T. L., and Pang, K. H., cultivation of gonococcus in Tyrode-serum mixture, III, 1101.
- Chin, Y., does acetylcholine play a part in the mechanism of melanophore expansion? III, 1002.
- Chinese Medical Committee on Nutrition, minimum nutritional requirement for China, III, 848.
- Chinn, B. D., actinomyces-like organism associated with a food-poisoning outbreak, III, 942.
- Chinn, H. See Alt, H. L., and Bellows, J. G.
- Chinoy, J. J., iodometric determination of starch. V. Starch in leaf material, III, 217.
- Chiodi, H., effects of thymectomy on growth and development of albino rats, III, 39. Effects of Hanson's thymus extract on growth and development of 5 successive generations of albino rats, III, 39. Effect of castration on the thymus weight of adult rats, III, 255. The thymus and its relation to the gonads, III, 475. Effect of castration before puberty on the thymus, III, 475.
- Chiodi, O. R., aluminium-alizarin reaction in microchemistry and its application in the detection of the aluminium cation, I, 219.
- Chiolero, J., and Meerwein, F., case of cachexia thyropriva simulating Simmonds' disease, III, 1049.
- Chiorazzo, C., and Perini, D., Cardarelli-Katzenstein test and peripheral venous pressure, III, 237.
- Chiplonkar, M. W., ultra-violet end of the solar spectrum, I, 501. Cylindrical lens spectrograph for the optical determination of the concentration of ozone in atmospheric layers near the ground, I, 537.
- Chipman, J. See Vaughan, J. C.
- Chiray, M., Justin-Besançon, L., Benda, R., Debray, C., and Lacour, M., effect of injections into bone marrow on blood pressure in dog, III, 967.
- Chisholm, D. C. See Lange, N. A.
- Chistiakov, F. See Jofa, S.
- Chistoni, A., and Beccari, E., effect of phenylsopropylamine on nervous system of dogs, III, 778.
- Chiti, G., differentiation of acid-fast bacilli by agglutination, III, 206. Differentiation of gallinaceous strain from other acid-fast bacilli after growth in fluid media, III, 206.
- Chitre, R. G. See Patwardhan, V. N.
- Chitrik, S. N., action of ethyl acetoacetate on 2-aminopyridine, II, 562.
- Chittrin, L., application of the tube method for measurement of normal speed of flame propagation in gases, I, 30.
- Chiurdoglu, G., Barchewitz, P., and Freymann, R., absorption spectra in the near infra-red (6000 to 11,500 Å.) of several compounds possessing rings of five or six carbon atoms, I, 8.
- and Guillemonat, A., Raman frequency variations of ethylenic linkings in cyclic hydrocarbons, I, 58.
- See also Lecomte, J.
- Chlebnikov, N., influence of gases on secondary emission of metals, I, 291.
- Chlopin, V. G., oxygen method for geological age determination based on atomic disintegration; application to Karelian, Wilberforce, and South Dakotan uraninites, I, 346.
- Passvik-Chlopin, M. A., and Volkov, N. F., particular mode of fission of the uranium nucleus, I, 592.
- and Vladimirova, M. E., geological age of uraninites and monazites from the pegmatite veins of north Karelia, I, 346.
- Chloupek, J., simple [inductive] capacity (impedance) bridge, I, 341.
- Chmelevski, V. I., and Fedorov, G. I., synthesis of rubicene from fluorenone, using metallic calcium, II, 540.
- and Postovskii, I. J., new syntheses of the red hydrocarbon rubicene, II, 414.
- Choay, A. See Boilot, Y.
- Chobot, G. R. See Wakerlin, G. E.
- Chodak, A. L. See Fedorov, B. P.
- Chodat, F., and Cortesi, R., staining of moss [cell] membranes, III, 1112.
- and Martin, G., inefficacy of colchicine in a purely nuclear process, III, 430.
- See also Wyss-Chodat, F.
- Choguill, H. S. See Brewster, R. Q.
- Choh, H., and Miyaji, T., controlling effect of "renal hormone" on water contents of skin, III, 66.
- Choi, S. C. See Yun, I. S.
- Choinard, A. See Barillet, F.
- Cholak, J., and Story, R. V., spectrographic analysis of biological material [for] lead, tin, aluminium, copper, and silver, III, 222.
- Cholewa, E. See Dziewoński, K.
- Cholewinski, J., and Marchlewski, L., absorption of light of short wavelength by indirubin and indigotin, I, 58. Absorption of ultra-violet light by organic substances. XLVIII, I, 299.
- Chollet, M. M. See Colin, H.
- Cholodni, N. G., and Gorbowski, A. G., influence of β -indolylacetic acid on photosynthesis, III, 882.
- Chomiakov, K. G., formation of unstable phases in the course of dehydration of crystalline hydrates, I, 82.
- Chomik, T. See Dziewoński, K.
- Choong, S. P., and Surugue, J., γ -radiation of the active deposit of actinium, I, 52.
- Chopin, M., determination of water content of plants, III, 1018.
- Chopra, R. N., Chatterjee, R. G., De, N., and Ghosh, S., chemistry and pharmacology of the leaves of *Skimmia laureola*, Hook, III, 418.
- Das, N. N., and Mukerji, B., action of cardiac drugs on embryonic heart explants, III, 85.
- and Ganguly, S. C., abstinence symptoms in opium addiction; treatment with glucose, III, 617.
- Ghosh, S., and Dutt, A. T., inorganic preparations of Indian indigenous medicine. VI. Samudra Phenā, III, 414.
- Mukerji, B., and Chakravarty, M., dextrorotatory hydrocupreidine derivatives. I. Comparative haemolytic activity, III, 90.
- and Roy, A. C., effect of Seitz filtration on haemolysins and the components of a haemolytic system, III, 8.
- See also Roy, A. C.
- Chor, H., and Dolkart, R. E., experimental muscular dystrophy in the guinea-pig; nutritional myodegeneration, III, 463.
- Choremis, K., and Spiliopoulos, G., paralysis after use of synthetic antimalaria drugs, III, 179.
- Chorine, V., and Levy, G., immunochemistry of leprosy. II. Specific hapten, III, 429.
- Chornock, F. See Gnerrant, N. B.
- Chosson, J., and Donnet, V., analysis of reflex hypertension of uterine origin, III, 966.
- Chotulev, J. P., dihydroxytetrachloroplatinic acid as a reagent for tin, I, 41.

- Chou, C. N. See Carmichael, H.
- Chou, C. Y., and Wang, C. W., excretion of male sex hormone in health and disease, III, 982.
- Chou, L. H. See Meisenheimer, J.
- Chou, T. Q., and Chu, H. P., isolation of hypoxanthine from earthworms, III, 68.
- Chouaiech, M., physical state of hæmoglobin and its crystallisation by ammonium sulphate, III, 623.
- See also Roche, J.
- Chouard, P., nature of the stimulus of heteroauxins in the formation of roots or buds at any selected part of a shoot, III, 108.
- Choucroun, N., separation of bacteria according to their [electric] charge; dissociation of *B. paratyphosus* B., III, 103. Sensitising antigen extracted from tubercle bacillus, III, 796.
- Choudhury, J. K., plant respiration. V. Respiration of storage organs in different oxygen concentrations, III, 731.
- Choudhury, S. C., and Basu, U. P., copper content of [Indian] foods, III, 918.
- Chouela, A. See Braier, B.
- Chovin, P., Pechmann dyes; scission of α -dinaphthyl compounds; formation of the mono-acid by hydrolytic fission; formation of an ester of an acid isomeric with the yellow mono-acid, II, 113, 336, 485.
- Chowdhury, D. K. See Ghosh, B. N.
- Chown, B., giant cell pneumonia of infancy as manifestation of vitamin-A deficiency, III, 1068.
- Lee, M., Teal, J., and Currie, R., production of nephritis in rats by parathyroid hormone and vitamin-D, III, 1049.
- Choyce, D. P. See Briggs, G.
- Chramov, V. A. See Artzimovitch, L. A.
- Chrapov-Schmarov, G. A. See Kulman, A. G.
- Christ, R. E. See Fuson, R. C.
- Christa, E., quartz-rich sediments with green cement from the Keupor of Franconia, I, 107.
- Christensen, B. E., Hansen, E., and Cheldelin, V. H., determination of ethylene, II, 194.
- Hansen, E., Cheldelin, V. H., and Stark, J. B., determination of ethylene evolved by apples and pears, III, 733.
- Christensen, B. V., and Gramling, L. G., biological assay of *Gelsemium*, III, 511.
- Christensen, E. H., and Hansen, O., determining the respiratory quotient at rest and during exercise, III, 462. Metabolism during prolonged severe exercise, III, 513. Working capacity and diet, III, 513. Hypoglycæmia, working capacity, and fatigue, III, 513. Respiratory quotient and oxygen uptake in exercise, III, 513.
- See also Asmussen, E.
- Christensen, H. N., contaminants of blood-phospholipins, III, 962.
- Christensen, J. F., spreading factor from serum, III, 532.
- Christensen, J. T. See Jacobsen, E.
- Christensen, P. B. See Elmy, A.
- Christensen, W. B., Johnson, M. J., and Peterson, W. H., properties of the lactic acid-racemising enzyme of *Clostridium butylicum*, III, 422.
- Christiaens, L. See Balgairies, E., and Breton, A.
- Christian, C. R., experiments with human agglutinating sera, III, 7. Urinary glucose in pregnancy, III, 844.
- Christian, S. M. See Jones, Grinnell.
- Christian, W. See Warburg, O.
- Christiani, A. F. von, specific action of cholesteryl butyrate on carcinoma cells, III, 598. Absence of butyrodéhydrogenase in carcinoma, III, 598.
- and Anger, V., sensitive test for ergosterol and differentiation of ergosterol and ergosteryl esters, II, 316, 420.
- Christiansen, J. A., intramolecular diffusion, quantum theory, and the calculation of unimolecular velocity constants, I, 568.
- Christiansen, J. B. See Deobald, H. J.
- Christiansen, T. See Samdahl, B.
- Christiansen, W. G. See Jurist, A. E., and Lott, W. A.
- Christianson, O. O., lesions produced in arteries of dogs by injection of lipins, III, 823.
- Christie, A. U. See Dunham, E. C.
- Christie, E. W. See Ruzicka, L.
- Christin, M. See Morel, J.
- Christman, C. C. See Tipson, R. S.
- Christy, R. F., and Kusaka, S., electric quadrupole moment of the deuteron, I, 297.
- Chrometzka, F., hormonal regulation of purine metabolism, III, 771.
- and Erlemann, F., determination of blood-diastase, III, 357.
- and Lubjuhn, H., purine metabolism, III, 406.
- and Voigt, H. E., action of calcium on purine metabolism, III, 707.
- Chromy, L., influence of hydron concentration on the dielectric potential and surface tension of solutions of valeric, hexoic, octoic, and nonoic acid, I, 256.
- Chrostowski, W. See Jablczynska-Jedrzejewska, H.
- Chrzyszcz, T., and Janicki, J., pepsin of pig stomachs, III, 624.
- and Zakomorny, M., degeneration of biochemical properties of strongly acidogenic cultures of *Aspergillus niger*, III, 627.
- Chrzyszczewska, A., and Sztabyb, R., N-halogenoamines. II. Sodium and potassium salts of azobenzene-*p*-sulphonbromoamide, II, 257.
- Chu, D. Y., fine structure of the line $\lambda 4686$ of ionised helium, I, 165.
- Chu, F. T., Woo, T., and Sung, C., vitamin-C metabolism in lactating mothers, III, 495.
- See also Wang, C. Y.
- Chu, H. I., Yu, T. F., and Liu, W. T., calcium and phosphorus metabolism in osteomalacia. VIII. Effects of ingestion of acid and alkali in patients with and without chronic nephritis, III, 856.
- Yu, T. F., Chang, K. P., and Liu, W. T., calcium and phosphorus metabolism in osteomalacia. VII. Effect of ultraviolet irradiation from mercury-vapour quartz lamp and sunlight, III, 514.
- Chu, H. J., *Clonorchis sinensis* in vitro. II. Action of various dyes, III, 307.
- Chu, H. P. See Chou, T. Q.
- Chu, J. P. See Greenwood, A. W.
- Chu, T. J., and Read, B. E., vitamin-C content of Chinese foods. II., III, 76.
- Ch'u, Y., and Forkner, C. E., errors in erythrocyte counts due to Hayem's solution avoided with Gower's solution, III, 5.
- Chuang, C. K., Hsing, C. Y. Kao, Y. S., and Chang, K. T., alkaloids of han-fang-chi; fangchinoline, a demethyl-tetrandrine, II, 233.
- Huang, Y. T., and Ma, C. M., syntheses in the sterol and sex hormone group. II. Synthesis of a 3-ketohexahydrochrysene, II, 270.
- Ma, C. M., Tien, Y. L., and Huang, Y. T., syntheses in the sterol and sex hormone group. III. Synthesis of 7-hydroxy-3'-keto-3 : 4-dihydro[cyclopenteno-1' : 2'-1 : 2-phenanthrene], II, 326.
- Chubb, W. F., photomicrography in colour, I, 221.
- Chuinard, E. G. See Todd, W. R.
- Chung, H., sternal puncture technique and its clinical value, particularly in the diagnosis of kala-azar, III, 226.
- and T'ung, T., non-specificity of "specific biological tests" for hydatid disease, III, 634.
- See also Teng, C.
- Chung, H. L. See Snapper, I.
- Churchill, E. D., thoracic surgery, III, 899.
- Churchill, J. R., formation of hydrogen peroxide during corrosion reactions, I, 574.
- Chute, A. L. See Braun-Menendez, E.
- Chute, R., significance of urea-splitting bacteria in the formation of urinary calculi, III, 487.
- Chvatov, A. D., relationship between energy of activation and activity of catalysts, I, 619.
- Chvojnitzkaja, M. A., and Romaniuk, N. M., effect of strychnine, cocaine, and chloral hydrate poisoning on dehydrogenase activity of nerve tissue, III, 832.
- Chvoles, G. J., blood-brain barrier in shock, III, 375.
- Chvostikov, I. A., polarisation of the green line (5577.3 Å.) in the light of the night sky, I, 227.
- and Erschova, N., instability of the ozone layer at sunrise and sunset and problem of determination of the height of the ozone layer, I, 283.
- Chwala, A., and Pailer, M., oxidation of phenol by hydrogen peroxide in presence of ferrous sulphate, II, 152.
- Chwalinski, S., reactions of phenylarsine oxide with alcohols, II, 291.
- Chweitzer, A., effects of sodium iodide on nerve threshold, III, 827. Localisation of peripheral "phosphenes" produced by electric stimuli in man, III, 968.
- Giaccio, C., and Capri, A., metabolism of nervous tissue; phosphorylation in the central nervous system I. Introduction, technique, and résumé of results. II. Soluble phosphorus compounds during rest. III. Soluble phosphorus compounds in iodoacetate-poisoned cerebrosinal cord of *Bufo viridis*. IV. Soluble phosphorus compounds in pulped nerve poisoned with sodium fluoride, III, 408.
- Gianci, V., fermentation of arabinose, III, 333.
- Ciaranà, E., oxidation of butyric acid in kidney, III, 609.
- Ciardi-Duprè, G., histogenesis of skeletal muscle, III, 112.

- Cicardo, V. H., sensitiveness to acetylcholine and neuromuscular excitability of the toad's gastrocnemius perfused with various concentrations of sodium, potassium, and calcium ions, III, 27. Effect of intra-arterial acetylcholine on the gastrocnemius of the toad curarised by various drugs, III, 27. Effect of ions on sensitivity of toad gastrocnemius to acetylcholine, III, 566. Action of potassium and acetylcholine on batrachian muscle, III, 826.
- and Marenzi, A. D., variations in the excitability and permeability of toad's heart to potassium, sodium, and calcium ions, III, 18.
- Ciccone, A., spectra produced by electric discharges in carbon monoxide, I, 298. Infra-red and Raman spectra of molecules, I, 300.
- Cichocka, J. See Przylecki, S. J. von.
- Cichocki, J., and Soltan, A., radioactivity produced in sulphur and phosphorus by fast neutrons, I, 294.
- Cieleszky, W. See Bodnár, J., and Szép, E.
- Ciglar, M. See Rezek, A.
- Cimbal, O., and Schaltenbrand, G., ocular symptoms due to irritation of the sympathetic occurring in tabo-paresis, III, 371.
- Cimerman, C., and Wenger, P., micro-separations of zinc by 8-hydroxyquinoline. IV. Zinc from manganese, iron, bismuth, mercury, arsenic, and antimony, I, 385.
- Cioffi, P. P., Williams, H. J., and Bozorth, R. M., single crystals with exceptionally high magnetic permeabilities, I, 13.
- Ciogliu, L., and Fradà, G., action of ascorbic acid on the spleen, III, 167. Effect of acaprine on arterial pressure, respiratory rhythm, and splenic contractility, III, 309.
- Cionga, E. See Janot, M. M.
- Cioranescu, M. See Hagiesco, D.
- Cipriani, A. See Penfield, W.
- Cirulis, A., copper azide and its complexes, I, 621.
- Ciuca, M., Soru, E., and Manolescu-Tudor, V., antigenic structure of meningococcus, III, 629.
- Ciuffi, G. See Mancini, M. A.
- Ciusa, R., and Brüll, L., mechanism of citric fermentation, I, III, 522.
- Civin, H., Schriener, I. A., Martello, G., and Hardy, J. D., determination of acid-insoluble matter in the sputa of silicotics, III, 317.
- See also Cattell, McK., and Gold, H.
- Claassen, A., volumetric and gravimetric determination of zirconium and hafnium, alone and in presence of each other, with selenious acid, I, 536.
- Claes, (Miss) A. See Itterbeek, A. van.
- Claesson, S. See Brohult, S.
- Claiborne, T. S. See Huxthall, G. M.
- Clancy, J. J. See Binns, F.
- Clapp, D. B., phosphorescence of tetraphenylmethane and related substances, II, 150.
- See also Morton, A. V.
- Clapp, H. G. See Kharasch, M. S.
- Clar, E. See Brass, K.
- Clarens, H. See Clarens, J.
- Clarens, J., and Clarens, H., kinetics of reactions in heterogeneous systems (solution, etc.); application to the excretion of urea by the kidney, I, 33.
- Clarenz, L. See Klenk, E.
- Clark, A., and Thomas, B. D., adsorption on heteropolar surfaces, I, 366.
- Clark, A. J., therapeutic use of barbiturates, III, 412. History of anaesthetics, III, 412. Effect of individual variation on quantitative pharmacology, III, 932.
- and Raventós, J., release of acetylcholine [in the heart] by vagal stimulation, III, 453. Hydrolysis of acetylcholine by [heart] tissues, III, 453. Tissue response to sympathetic stimulation, III, 749. Durations of responses to adrenaline, tyramine, and ephedrine, III, 860.
- Raventós, J., Stedman, Edgar, and Stedman, Ellen, kinetics of cholinesterase, III, 321.
- Clark, B. B., Cominole, B., and Martin, S. J., chronic oral administration of atebirin, III, 511. Effect of atebirin on liver and kidney function, III, 511.
- Shires, E. B. S., jun., Campbell, E. H., and Welch, C. S., action of "syntropan" on the gastrointestinal tract, III, 930.
- Clark, C. H. D., inter-relation of dissociation energy, inter-nuclear distance, and bond order for carbon-carbon linkages, I, 455. Inter-relation of dissociation energy and inter-nuclear distance for some simple di-atoms in ground states, I, 598.
- and Stoves, J. L., systematics of band-spectral constants. IV. Inter-relation of equilibrium vibration frequency and distance for diatomic nuclei in ground and excited states, I, 11. Calculation of equilibrium internuclear distances for diatomic hydrogen, hydrides, and deuterides in ground and excited states, I, 304.
- Clark, C. P. See Ungerleider, H. E.
- Clark, D., Hough, H., and Wolff, H. G., headache produced by histamine, III, 132.
- Clark, D. E. See Stewart, C. D.
- Clark, E. P., preparation of hydriodic acid suitable for alkoxyl and Friedrich-Kjeldahl nitrogen determinations, I, 92. Dyer method for identification and determination of volatile fatty acids, II, 133. Constituents of species of *Helium*. II. Tenulin, II, 435.
- Clark, Francis M., and Tanner, F. W., bacterial metabolism of sulphur. III. Formation of hydrogen sulphide by thermophilic bacteria, III, 523.
- Clark, G., Magoun, H. W., and Ranson, S. W., hypothalamic regulation of body temperature, III, 467. Temperature regulation in cats with thalamic lesions, III, 1036.
- See also Ranson, S. W.
- Clark, G. A., Gaunt, R. T., and Timperley, W. A., blood-clotting, III, 353.
- Clark, G. L., Gross, S. T., and Smith, W. H., X-ray diffraction patterns of crystalline sol rubber prepared from ethereal solution, I, 197. X-ray diffraction patterns of *Hevea*, manihot, and other rubbers, I, 512.
- and Tyler, W. P., lead oxides. II. Hydrous, normal, and active lead monoxides, I, 154.
- See also Sweany, H. C.
- Clark, H. E., oxalates in pineapples, III, 536.
- Clark, J. A., jun. See Hughes, J. D.
- Clark, J. H., effect of parathyroid hormone on the permeability of lens capsule to calcium, III, 673.
- Clark, J. S. See Hill, A. G.
- Clark, L. V. W. See Nissan, A. H.
- Clark, N. A., Thomas, B. H., and Frahm, E. E., production of vitamin-B₁, -B₂, and -C in *Lemna* grown in absence of organic matter, III, 636.
- Clark, O. See Halpern, O.
- Clark, O. P., evipan in dental surgery, III, 314.
- Clark, P. E., and Garrett, A. B., photo-voltaic cells; spectral sensitivities of copper, silver, and gold electrodes in solutions of electrolytes, I, 474.
- Clark, R. H., enzyme activators, III, 321.
- See also Fisher, H. E.
- Clark, R. J., Meniere's syndrome, III, 375.
- Clark, R. L., jun., vitamin deficiency complicating chronic ulcerative colitis, III, 73.
- Dixon, C. F., Butt, H. R., and Snell, A. M., deficiency of prothrombin associated with various intestinal disorders; treatment with anti-hemorrhagic vitamin-K, III, 892.
- Clark, S. F. See Russell, A.
- Clark, S. L., responses following electrical stimulation of the cerebellar cortex in the normal cat, III, 466.
- Clark, W. E. Le G., and Sunderland, S., structural changes in isolated visual cortex, III, 1036.
- McKeown, T., and Zuckerman, S., visual pathways concerned in gonadal stimulation in ferrets, III, 479.
- and Russell, W. R., cortical deafness without aphasia, III, 373. Efferent connexions of the centre median nucleus, III, 467.
- Clark, W. F. See Brown, H. R., jun.
- Clark, W. G., effect of adrenalectomy on intestinal absorption of sodium chloride, III, 977.
- See also MacKay, E. M.
- Clark, W. I., report on medical progress; industrial medicine, III, 936.
- Clarke, B. L., and Hermance, H. W., paper as medium for analytical reactions; applying reagent papers to large volumes of solutions, I, 40. Apparatus for micro-sublimation, I, 223.
- and Wooten, L. A., internal electrolysis as a method of analysis, I, 578.
- Clarke, E. T. See Korff, S. A.
- Clarke, F. M. See Goldstein, K.
- Clarke, G. E. See Tauber, E. B.
- Clarke, G. L., and James, H. R., laboratory analysis of selective absorption of light by sea-water, I, 548.
- Clarke, I. D., Frey, R. W., and Hyland, H. L., seasonal variation in tannin content of *Lespedeza sericea*, III, 1112.
- Clarke, M. F., nitrogen distribution in lucerne hay cut at different stages of growth, III, 106.
- Clarke, S. H., fine structure of the plant cell wall, III, 218.
- Clarke, T. H., and Stegeman, G., heats of combustion of mono- and di-saccharides, I, 473.
- See also Brunswick, A.
- Clarke, T. W., adiposogenital dystrophy, III, 575.
- Clarkson, L. S., Griffith, R. O., and McKeown, A., kinetics of the nitrite-bromine reaction, I, 31.
- Classen-Nekludova, M., influence of solution by an acid of the surface of bismuth and zinc crystals on their mechanical properties, I, 307.

- Clauberg, C., treatment of chronic salpingitis with follicle hormone, III, 586.
- Clauberg, K. W., type diagnosis for diphtheria bacilli, III, 203. Use of fluorescence microscopy in bacteriological and virus work, III, 795.
- and Hückel, R., influence of tissue lipins on the course of bacterial intoxication, III, 794.
- Claudatus, I., micro-determination of polypeptide-nitrogen in biological liquids with use of an automatic control, III, 735.
- and Botezatu, M., micro-determination of urea in biological fluids by oxidation of dioxanthylurea with iodate, III, 539.
- and Gheorghiu, A., micro-method for determination of fatty acids in blood after sulphuric-iodic acid oxidation, III, 817.
- Claude, A., fraction from normal chick embryo similar to the tumour-producing fraction of chicken tumour. I., III, 225. Properties of inhibitor associated with active agent of chicken tumour. I., III, 1063.
- Claude, H., Simonnet, H., and Stora, R., inhibitory influence of cerebrospinal fluid from dementia præcox cases on the genitals of male mice, III, 716.
- Claudian, I., and Ghermani, A., lack of vitamin-C in pellagra demonstrated by the saturation test, III, 403.
- Claus, P. E. See Guyer, M. F.
- Clausen, H. J., and Motshin, R., pineal eye of the lizard *Anolis carolinensis*, III, 1039.
- Clausen, S. W., pharmacology and therapeutics of vitamin-A, III, 163.
- and McCoord, A. E., carotenoids and vitamin-A of blood, III, 11.
- Claussen, W. F. See Wall, F. T.
- Clavel, C. See Sédallian, P.
- Clawson, B. J., effect of a primary pulmonary tuberculous lesion (B.C.G.) on experimental pulmonary tuberculosis in rabbits, III, 206.
- Clay, H. L., and Lawson, H., relationship of hyperglycemic principle in diabetic urine to pancreas and hypophysis, III, 910.
- Clay, J., and Bruins, E. M., variations of cosmic-ray intensity with variations of atmospheric pressure and temperature at sea-level, I, 445.
- and Duvergé, F. J. H., number of secondary electrons accompanying the penetrating component of cosmic rays in different materials, I, 175.
- and Gemert, A. G. M. van, decrease of intensity of cosmic rays in the earth down to 1380 m. water equivalent, I, 399. Absorption of hard cosmic rays in different materials, I, 446.
- Jonker, K. H. J., and Wiersma, J. T., decay of the penetrating cosmic radiation in different directions, I, 175, 446.
- and Stammer, H. J., ionisation by cosmic rays in gases, I, 446.
- and Westerhof, F., determination of small amounts of emanation in water, I, 215.
- See also Clay, P. H.
- Clay, P. H., penetrating component of cosmic radiation, I, 116.
- Gemert, A. G. M. van, and Clay, J., penetrating cosmic radiation in water and rock down to 450 m. of water, I, 175.
- Clayton, W., and Morse, J. F., direct observation of emulsification, I, 318.
- Cleary, R. V., Maier, J., and Hitchings, G. H., metabolism of chlorinated naphthalenes, III, 409.
- Cleaves, A. P., and Plyler, E. K., infra-red absorption spectrum of methylamine vapour, I, 549.
- Cleckley, H. M., Sydenstricker, V. P., and Geeslin, L. E., nicotinic acid in treatment of atypical psychotic states, III, 767.
- Clegg, J. L., serum-potassium and -calcium in insulin shock therapy, III, 582.
- Cleghorn, R. A. See Armstrong, C. W. J., and Hall, G. E.
- Clemence, L. W. See Raiziss, G. W.
- Clémens, P., variations of glycaemia due to injection of pentamethylenetetrazole in schizophrenics, III, 470. Mechanism of action of vitamin-D on mineral metabolism, III, 769.
- Clemens, W. A., Rawson, D. S., and McHugh, J. L., biological survey of Okanagan lake, British Columbia, I, 283.
- Clement, H., magnesium pentamethyl-phenyl bromide, II, 60.
- Clementi, A., arginine as sole precursor of urea in the avian organism, III, 406. Compensatory hyperdiastole, III, 455. Electro-acoustic recording of oesophageal murmur during deglutition (phonodeglutogram), III, 985.
- Clements, D. I., and Howes, N. H., anterior pituitary and growth in axolotl (*Amblystoma tigrinum*, Green, neotenic form). I. Effects of injection of growth-promoting extracts of anterior pituitary, III, 1046.
- Clements, F. W., and Hutchinson, R. C., ash constituents of Australian fish, III, 695.
- Clements, H. F., and Engard, C. J., upward movement of inorganic solutes as affected by a girdle, III, 211.
- Clements, L. P., embryonic development of the respiratory portion of the pig's lung, III, 112.
- Clemmesen, J., influence of Roentgen radiation on immunity to Shope fibroma virus, III, 698.
- Clemon, G. R., and Dawson, E. C., synthesis of 3:4:8:9-dibenzo-5:10-diazapyrene, II, 452.
- and Hoggarth, E., synthesis of 5-substituted rubans, II, 489.
- Raper, R., and Robson, A. C., optical isomerism due to symmetrically placed hydrogen and deuterium atoms. II., II, 205.
- and Robson, A. C., polymerisation of dideuteracetylene, II, 197.
- Clerc, A., Lévy, R., and Calo, A., bigeminal sinus extrasystoles, III, 558.
- and Paris, Raoul, physiological properties of the cerebral cortex of *Mansonella altissima*, A. Chev., III, 33.
- and Quinquaud, A., monophasic wave produced by cauterisation of the apex of the heart deprived of blood, III, 17. Evolution of ventricular electric complex in bloodless heart with apex removed, III, 17. Effect on electrocardiogram of removing successive portions of the heart, III, 655. Effect of traction on ventricular apex on electrocardiogram following removal of ventricular wall, III, 745.
- Clerc, O. See Clerc, W.
- Clerc, W., and Clerc, O., physiological extravasations and the histological role of extravasated erythrocytes, III, 446. Continuity of tissues and nature of cambium, III, 957.
- Cleveland, D. E. H., varioliform eruption from sulphanilamide, III, 1083.
- and Turvey, S. E. C., use of mapharsen for terminating malaria artificially produced by inoculation, III, 1088.
- Cleveland, F. F., and Murray, M. J., depolarisation measurements on Raman lines by an easy, accurate method, I, 403.
- See also Murray, M. J.
- Cleveland, L. R., origin and development of the achromatic figure, III, 809.
- Cliffcorn, L. E., Elvehjem, C. A., and Hart, E. B., ration for study of perosis in chicks, III, 600.
- Clifford, C. W., growing of Rochelle salt crystals for radio experiments, I, 341.
- Clifford, M. H. See Jones, C. M.
- Clifford, P. A., stability of dithizone solutions, I, 98.
- Clifford, S. H., cyanosis following intracranial injuries, III, 461. Haemorrhagic disease of new-born, III, 549.
- Clifton, C. E., utilisation of amino-acids by *Clostridium botulinum*, III, 1011.
- Clifton, W. M. See Gibson, S.
- Cline, E. W., acute yellow atrophy of the liver following sulphanilamide medication, III, 303.
- Cline, J. E., and Forbes, G. S., mercury-sensitised decomposition in light of λ 1849 Å. I. Carbon dioxide, I, 272.
- See also Forbes, G. S., and Fox, C. L., jun.
- Clippinger, D. R., and Foulk, C. W., electrometric indicators with the dead-stop end-point system; applications to neutralisation and precipitation reactions, I, 340.
- Cloetens, R., identification of two "alkaline" phosphatases in animal organs, III, 723.
- See also Verstraete, A.
- Clogston, A. M. See Goldberg, L., and Van Atta, L. C.
- Closs, K. See Folling, A.
- Clotofski, E. See Friese, H.
- Cloudman, A. M., transferable liver neoplasm (C 198) arising in female mouse of leaden strain, III, 1063.
- See also Little, C. C.
- Clow, A., and Pearson, G., pure ethyl alcohol for absorption spectrophotometry, I, 582.
- Clowes, G. H. A., Davis, W. W., and Kral, M. E., reactions of carcinogenic and related compounds with cellular constituents. I. Interactions of polycyclic hydrocarbons, cholesterol, β -dihydrocholesterol, and ergosterol in surface films, III, 763.
- Clusius, K., and Dickel, G., separation of the chlorine isotopes, I, 211. Tube process for separation of liquids, I, 224. Isolation of the light isotope of chlorine, at. wt. 34.979, in the separation tube, I, 442.
- Kruis, A., and Konnert, F., molecular heat, heat of vaporisation, entropy, and chemical constant of krypton, I, 67.
- and Weigand, K., vapour pressure of xenon, the Lennard-Jones relation, and the constancy of T_c/T_k for the rare gases, I, 190, 363.

- Clusius, K. See also Frank, A., and Grafe, D.
- Clutterbuck, P. W. See Calam, C. T.
- Cluzel, J. See Cathala, J.
- Coates, G. M., Davis, W. B., and Gordon, W., parenteral administration of substances in upper respiratory infections, III, 180.
- Cobb, S., Cohen, M. E., and Ney, J., anti-convulsive action of vital dyes, III, 470.
- and Cole, E. M., stuttering, III, 255.
- See also Schwab, R. S.
- Cobet, R., and Ratschow, M., treatment with diethylstilbœstrol, III, 589.
- Ratschow, M., and Steckner, M. L., action of dihydroxydiethylstilbene on peripheral circulation, III, 589.
- Coblentz, W. W., physical aspects of ultraviolet therapy, III, 194.
- and Stair, R., spectral reflectivity of rhodium, I, 186. Distribution of ozone in the stratosphere, I, 391.
- Coburn, A. F., and Moore, L. V., prophylactic use of sulphanilamide in streptococcal respiratory infections and rheumatic fever, III, 410.
- and O'Connell, S., serological typing of *S. hemolyticus*, III, 1103.
- and Pauli, R. H., significance of prolonged streptococcal antibody development in rheumatic fever, III, 430.
- Precipitinogen in serum prior to onset of acute rheumatism, III, 531.
- See also Lockwood, J. S.
- Cocconi, G., production of yukons, I, 546.
- and Tongiorgi, V., production of neutrons by cosmic rays, I, 296.
- Cochran, J. R., jun., improved method of applying moist heat to infected extremities, III, 860.
- Cochran, W. G. See Tarr, H. L. A.
- Cockbain, E. G., and Schulman, H., molecular interaction in monolayers; association between amines and organic acids, I, 367. Structure of protein films, I, 562.
- Cocker, W., and Harris, J. O., preparation of *m*-dialkylaminobenzaldehydes, II, 427.
- Cockroft, J. D., cyclotron and its applications, I, 221. New phenomena in liquid helium, I, 461.
- Cocora, D. See Nenitzescu, C. D.
- Coe, F. O., radiation therapy in treatment of inflammatory lesions, III, 937.
- Coeelho, E., hyperthyroidism without classical symptoms and signs, III, 578.
- and De Oliveira, A., metabolism of carbohydrates in experimental tetany, III, 256.
- Cooling, M. B., optical study of the liquid-vapour equilibrium in capillary systems, I, 190.
- Coenen, M. L. See Wizinger, R.
- Cœur, A. See Mouriquand, G.
- Coffin, C. C. See Dacey, J. R.
- Coffman, J. R. See Hoskins, W. H.
- Coggeshall, H. C., and Bauer, Walter, treatment of gonorrhœal and rheumatoid arthritis with sulphanilamide, III, 610.
- Coggeshall, L. T. See Eaton, M. D.
- Coggin, C. B. See Armstrong, E. L.
- Coghi, L. See Ferrari, A.
- Coghill, G. E., early movements of the opossum with special reference to the walking gait, III, 29.
- Coghill, R. D., configuration of glutamic acid from scarlet fever antitoxin, III, 876.
- Cohen, A. See Treadwell, W. D.
- Cohen, A. C., tuberculosis in coal miners, III, 867.
- and Charr, R., lobar pneumonia in anthracite miners: mortality and complication statistics, III, 621.
- Cohen, A. E., treatment of chronic urticaria with a high-protein, low-sodium, acid-ash diet with added potassium chloride, III, 191.
- Cohen, B., and Myerson, A., effective use of phenobarbital and benzedrine sulphate in treatment of epilepsy, III, 130.
- Cohen, Benjamin. See Thomas, A. W.
- Cohen, C. H., stability of therapeutic effect in metrazol treatment of schizophrenia, III, 902.
- Cohen, H., and Davies, S., specific factor in extracts of the choroid plexus influencing the permeability of the myelencephalic roof, III, 470, 1022.
- and Jupe, M. H., discussion of skeletal changes in metabolic and endocrine disorders, III, 135.
- Cohen, I. See Viehoveer, A.
- Cohen, J. L. See Struck, H. C.
- Cohen, K., and Urey, H. C., van der Waals forces and the vapour pressures of ortho- and para-hydrogen and ortho- and para-deuterium, I, 248. Vapour pressure of *o*- and *p*-H₂, and D₂, I, 410. Thermal properties of ortho- and para-hydrogen and ortho- and para-deuterium, I, 515.
- Cohen, L. H., early effects of metrazol therapy in chronic psychotic overactivity, III, 131. Antagonism of metrazol and sodium amylal in schizophrenic patients, III, 615.
- See also Haggard, H. W., and Rubin, M. A.
- Cohen, M. B., vitamin-C deficiency; sensitivity to neoarsphenamine and anaphylactic shock, III, 290. Preserving pollen and dust extracts, III, 936.
- Cohen, M. E., and Thomson, K. J., circulation in pregnancy, III, 822.
- See also Cobb, S., and Thomson, K. J.
- Cohen, P., and Lapin, J., prophylaxis against whooping cough in exposed children, with special reference to serum, III, 1012.
- Cohen, P. P., micro-determination of glutamic acid, III, 639. Transamination in pigeon breast muscle, III, 997.
- and Stark, I. E., hepatic ketogenesis and ketolysis in different species, III, 65.
- Cohen, R., needle guide and blood collection apparatus, III, 639. Buccal oxygen-ether catheter, III, 932.
- See also Leulier, A.
- Cohen, S. B. See Quodling, F. M.
- Cohen, S. G. See Bartlett, P. D.
- Cohen, S. L. See Ruzicka, L.
- Cohen, S. S. See Altnow, H. O., and Chargaff, E.
- Cohen, V. L., fractionation of a skin-sensitising serum by means of neutralisation and dilution, III, 192.
- Cohen, V. W., Goldsmith, H. H., and Schwinger, J., neutron-proton scattering cross-section, I, 172.
- See also Zinn, W. H.
- Cohen, W. See Osgood, E. E.
- Cohn, A., microscopic diagnosis and cultural differentiation of gonococcus, III, 794.
- Cohn, A. E., and Macleod, A. G., action of acetyl- β -methylcholine on the frog's heart, III, 860.
- Cohn, C., dipeptidase action, III, 1013.
- Cohn, D. J., Kaplan, I., and Levinson, A., calcium and phosphorus in the cerebrospinal fluid, III, 573.
- Tannenbaum, A., Thalheimer, W., and Hastings, A. B., influence of oxygen and carbon dioxide on blood of normal and pneumonic dogs, III, 661.
- See also Kaplan, I.
- Cohn, E. J., McMeekin, T. L., Ferry, J. D., and Blanchard, M. H., physical chemistry of amino-acids, peptides, and related substances. XII. Interaction between dipolar ions in aqueous solution, I, 144.
- See also Davis, B. D.
- Cohn, G., Hedvall, J. A., Assarsson, A., and Berger, S., photoactivation of crystals and its influence on adsorption processes, I, 561.
- See also Hedvall, J. A.
- Cohn, M. L. See Corper, H. J.
- Cohn, W. E., and Greenberg, D. M., mineral metabolism with artificial radioactive isotopes. III. Influence of vitamin-D on phosphorus metabolism of rachitic rats, III, 1079.
- See also Joseph, M.
- Cohn, W. M., quantitative spectrographic analysis of small amounts of rubidium and potassium in biological materials, III, 1114.
- Cokkinis, A. J., sulphonamide chemotherapy in surgical infections, III, 82.
- Cole, C. L., and Winters, L. M., artificial insemination in dairy cattle, III, 481.
- Cole, E. M. See Cobb, S.
- Cole, H. H., and Hart, G. H., effect of pregnancy and lactation on growth in the rat, III, 59.
- See also Kleiber, M.
- Cole, H. L., and Cardoso, H. T., alepic and alepyric acids, new homologues of chaulmoogric acid, II, 318. Alepic, alepyric, aleprectic, and aleprolic acids, new homologues of chaulmoogric acid, II, 504.
- Cole, H. N., Driver, J. R., Bowen, S. S., and Cooper, G., war gases and industrial hazards in their manufacture, III, 1093.
- See also Sollmann, T.
- Cole, K. S., and Curtis, H. J., electric impedance of the squid giant axon during activity, III, 900.
- and Hodgkin, A. L., membrane and protoplasm resistance in the squid giant axon, III, 900.
- Cole, L., treatment and prognosis of tetanus, III, 83.
- Cole, L. J. See Irwin, M. R.
- Cole, R. K., oviduct of fowl in relation to variations in condition of the albumin, III, 740.
- Cole, V. V. See Harned, B. K.
- Cole, W. See Bachmann, W. E.
- Colebrook, L. See Fuller, A. T.
- Coleby, L. J. M., history of Prussian-blue, I, 342.
- Coleman, G. E., hearing by bone conduction, III, 38.
- Coleman, George H., Gilman, H., Adams, C. E., and Pratt, P. E., reaction of diazomethanes with Grignard reagents, II, 25.

- Coleman, *Gerald H.* See Dow Chem. Co.
 Coleman, *L. L.* See Maybaum, *J. L.*
 Colien, *F. E.*, action of chemical and physical agents on *Clostridium welchii* and its toxin, III, 330.
 Colin, *H.*, and Augier, *a-d*-mannoside of sodium *l*-glycerate in the genus *Polysiphonia* of the Floridaceae, II, 301.
 and Chollet, *M. M.*, inulogenesis in plant annuals, III, 636.
 and Lemoyne, *S.*, early diagnosis of [plant] species, III, 1109.
 Collari, *N.*, analysis of minerals from Canali Serici, I, 429.
 See also Piepoli, *P.*
 Collens, *W. S.*, and Boas, *L. C.*, technique for successful use of protamine-zinc-insulin, III, 976.
 Coller, *F. A.*, Bartlett, *R. M.*, Bingham, *D. L. C.*, Maddock, *W. G.*, and Pedersen, *S.*, replacement of sodium chloride in surgical patients, III, 301.
 and Jackson, *H. C.*, surgical aspects of hypoglycaemia associated with damage to the liver, III, 485.
 Collet, *H.* See Canals, *E.*
 Collet, *J.* See Roche, *J.*
 Collet, *L.* See Scherer, *H. J.*
 Collett, *A. R.* See Ashburn, *H. G.*
 Collett, *E.*, and Eriksen, *B.*, interrelations of vitamins, III, 163.
 Collier, *H. O. J.*, central nervous activity in earthworm. I. Responses to tension and to tactile stimulation. II. Properties of tension reflex, III, 1038.
 Collier, *L. J.*, Stiles, *W. S.*, and Taylor, *W. G. A.*, carbon and graphite; variation with temperature of electrical resistance between 0° and 900°, I, 187.
 Collier, *V., jun.* See Schroeder, *E. F.*
 Collier, *W. A.*, clarification test for demonstration of Forssmann antigen and antibodies, III, 209. Infectious polyarthritis of rats, III, 728. Antibodies in rat polyarthritis, III, 797.
 Collin, *R.*, local sensitivity of pituitary, III, 972. Anastomotic vessels of the hypophysis and cavernous sinus in guinea-pig, III, 1044.
 Collings, *W. D.*, effect of pseudopregnancy on life-span of adrenalectomised cats, III, 1050.
 Collins, *C. J.* See Arnold, *R. T.*
 Collins, *D. A.*, and Spiegel, *E. A.*, ocular rotation; influence of anaesthetics and operations on various parts of the central nervous system, III, 30.
 Collins, *D. C.*, dangers of employing thorium dioxide solution in mammography, III, 914.
 Collins, *D. H.* See Woodmansey, *A.*
 Collins, *E. H.*, Zeeman effect of the hyperfine structure of optically excited mercury resonance radiation, I, 502.
 Collins, *G. B.*, Waldman, *B.*, and Poyle, *W. R.*, electro-disintegration of beryllium, I, 232.
 Waldman, *B.*, Stubblefield, *E. M.*, and Goldhaber, *M.*, nuclear excitation of indium by X-rays, I, 233.
 Collins, *J. R.*, new infra-red absorption band of liquid water at 2.52 μ , I, 239.
 Collins, *L. H., jun.* See Scheie, *H. G.*
 Collins, *S. C.*, pressure regulator, I, 45.
 and Keyes, *F. G.*, year's progress in precise measurement of effects of intermolecular potential in gases, I, 135.
 Collins, *V. L.* See Rawls, *W. B.*
 Collip, *J. B.*, results of recent studies of anterior pituitary hormones, III, 378.
 See also Billingsley, *L. W.*, McEuen, *C. S.*, Mortimer, *H.*, Nienfeld, *A. H.*, O'Donovan, *D. K.*, and Rabinowitch, *I. M.*
 Collot, *A. M.*, and Charaux, *C.*, extraction of myricitrin from leaves of the hazel and the tree of Judas, III, 639.
 Colmers, *F. A.*, basal anaesthesia with sigmodal, III, 314.
 Colombani, *A.*, thermal evolution of the conductivity of thin nickel sheets, I, 246.
 Colombi, *C.*, electro-acoustic recording of respiratory murmur in normal and diseased subjects, III, 462.
 Colombini, *N.*, relationship between tetany and hypocalcaemia in dogs poisoned with phosphorus, III, 138. Spermatogenesis in the myriapod *Pachyulus communis*, III, 481.
 See also Domini, *G.*, and Peruzzi, *P.*
 Colombino, *P.*, liberation of secondary electrons from metal surfaces by electron impact, I, 348.
 Colombo, *E. O.* See Peralta Ramos, *A.*
 Colombo de Allende, *I. L.*, female sex organs of the toad *Bufo arenarum*, III, 384.
 Colonge, *J.*, and Mostafavi, *K.*, condensation of ketones with acid chlorides in presence of metallic chlorides, II, 49.
 Action of acid chlorides on aliphatic ethylenic hydrocarbons in presence of stannic chloride. I and II, II, 140.
 Colonna, *M.* See Mangini, *A.*
 Colowick, *S. P.*, and Cori, *C. F.*, aminoethyl phosphoric ester in small intestine of rabbits and pigs, III, 1058.
 See also Cori, *G. T.*
 Colp, *R.*, and Doubilet, *H.*, clinical significance of pancreatic reflux, III, 387.
 Colquhoun, *D. B.* See Robertson, *W. M. F.*
 Coltrane, *D.* See Ginnings, *P. M.*
 Colucci, *G.* See Macchia, *E.*
 Columbati, *S.*, comparative action of insulin and cardiazol as indicated by Donaggio's reaction, III, 128.
 Colwell, *R. C.*, and Friend, *A. W.*, velocity of sound, I, 14.
 Friend, *A. W.*, and McGraw, *D. A.*, velocity of sound, I, 188.
 Coman, *D. R.*, effect of prontosil and related compounds on the chemotropism of leucocytes, III, 177.
 McCutcheon, *M.*, and De Camp, *P. T.*, failure of streptococcal antibodies to influence chemotaxis of leucocytes, III, 1026.
 See also McCutcheon, *M.*
 Comastri, *H. T.*, preparation of cyanogen iodide, I, 483. Preparation of ethyl hypochlorite, II, 403.
 Combemale, *P.*, Warembourg, *H.*, and Parsy, *D.*, blood-sugar and residual chromic index in insulin coma, III, 120.
 Combes, *L. S.*, Frye, *R. M.*, and Kent, *N. A.*, interferometer wave-lengths of lines in the secondary spectrum of hydrogen, I, 596.
 Combes, *R.*, and Gertrude, *M. T.*, biochemical possibilities of a plant species, III, 730. Effect of alpine climate on plant metabolism, III, 730.
 Combiesco, *C.* See Combiesco, *D.*, and Soru, *E.*
 Combiesco, *D.*, Combiesco, *C.*, and Soru, *E.*, immunological properties of the carbohydrate-lipin complexes extracted from typhoid bacilli, III, 104. Chemical properties of the typhoid bacillus antigens, III, 432.
 Comeau, *W. J.*, Cheyne-Stokes respiration and auriculo-ventricular conduction, III, 455.
 and White, *P. D.*, heart volume determinations by the Rohrer-Kahlstorf formula, III, 558. Body build and heart size, III, 821.
 See also Thompson, *W. P.*, and Wise, *N. B.*
 Comfort, *M. W.* See Welch, *C. S.*
 Comhaire, *S.* See Chèvremont, *M.*
 Cominole, *B.* See Clark, *B. B.*, and Martin, *S. J.*
 Common, *R. H.*, phytic acid and mineral metabolism in poultry, III, 502.
 and Kerr, *W. R.*, bovine contagious abortion. II. Relation between plasma-proteins and agglutination titre, III, 11.
 Commoner, *B.*, nature of staining of unfertilised *Chatopterus* eggs by neutral-red, III, 61. Effect of cyanide on respiration of bakers' yeast in various concentrations of glucose, III, 626.
 Companetz, *V.* See Georgesco, *I. D.*
 Comparat, *P.* See Thibaud, *J.*
 Compton, *J.*, structure of cellulose ethers obtained by the methylation of cellulose materials dispersed in quaternary ammonium bases, II, 10. Behaviour of lant fibres dispersed in cuprammonium hydroxide solution, III, 217.
 Compton, *K. T.* See Lamar, *E. S.*
 Comroe, *B. I.*, sulphur therapy in arthritis, III, 779.
 See also Griffith, *J. Q., jun.*
 Comsa, *G.* See Gingold, *N.*
 Comucci, *P.*, rocks collected by the Italian geographical expedition to Karakorum (1929), I, 48.
 Condon, *E. U.*, external photo-electric effect of semi-conductors, I, 126. Theory of nuclear structure, I, 400.
 Altar, *W.*, and Eyring, *H.*, theory of optical activity, I, 303.
 Condorelli, *L.*, changes in venous pressure, III, 459.
 Conger, *P. S.*, contribution of diatoms to the sediments of Crystal Lake, Vilas Co., Wisconsin, I, 342.
 Conlonjou, and Hécaen, anorexia nervosa; action of anterior pituitary extracts, III, 678.
 Conn, *G. K. T.*, repairing Nernst filaments, I, 104.
 and Sutherland, *G. B. B. M.*, infra-red absorption spectrum of tetradeuter-ethylene, I, 549.
 and Twigg, *G. H.*, infra-red analysis applied to the exchange reaction between ethylene and deuterioethylene, I, 377.
 Conn, *H. J.*, work of the Commission on standardisation of biological stains, III, 112.
 Conn, *J. B.*, Kistiakowsky, *G. B.*, and Smith, *E. A.*, heats of organic reactions. VII. Additions of halogens to olefines. VIII. Further hydrogenations, including those of some acetylenes, I, 28, 473. Bromination of trimethylethylene, II, 96.
 Conn, *J. W.*, Newburgh, *L. H.*, Johnston, *M. W.*, and Sheldon, *J. M.*, carbohydrate metabolism in chronic infectious hepatitis, III, 272.
 See also Kline, *E. M.*, and Newburgh, *L. H.*
 Connal, *K. I.* See Bonser, *G. M.*
 Conner, *J. A.* See Hyland, *C. M.*

- Connor, C. L., aetiology and pathogenesis of alcoholic cirrhosis of the liver, III, 594.
and Chaikoff, I. L., production of cirrhosis in fatty livers with alcohol, III, 272.
See also Carr, J. L.
- Connor, R., and McClellan, W. R., Michael condensation. V. Influence of experimental conditions and structure of the acceptor on the condensation, II, 139.
See also D'Ouville, E. L.
- Conrad, M. See Fischer, Hans.
- Conrad, R. M. See Beadle, B. W.
- Consden, R., Duveen, D. I., and Kenyon, J., resolution of *n*-propylallylcarbinol, I, 11.
- Consolazio, W. V., and Talbott, J. H., modification of the Shohl-Bennett method for determination of potassium in serum and urine, III, 222.
See also Talbott, J. H.
- Constable, F. H., comparison of the adsorption, electrolytic, and interference methods of measuring film areas, I, 609.
- Constant, F. W., and Formwalt, J. M., ferromagnetic impurities. I, I, 555.
- Constantinesco, D. See Solacolu, T.
- Constantinesco, M. See Solacolu, T.
- Constantinesco, P. See Grecou, A., and Ionesco, N. G.
- Contat, C., and Spycher, C., action of potassium chlorate on experimental poliomyelitis in monkeys, III, 1085.
- Conte-Marotta, R., influence of choline on ketonuria, III, 609.
- Conteaux, R., junction of striated muscle fibres and tendons in mammalian embryos, III, 25.
- Contino, F., eye of *Argyrolepeus hemigymnus*, III, 834.
- Contratto, A. W. See Robinson, R. W.
- Convers, L., adsorption in metallic solution, I, 460.
- Conway, E. J., and Cooke, R., deaminases of adenosine and adenylic acid in blood and tissues, III, 518. Blood-ammonia, III, 556.
- Conwell, D. V., and Kurth, C. J., insulin therapy in mental diseases, III, 250.
- Cook, A. H., catalytic properties of the phthalocyanines. I. Catalase properties. II. Oxidase properties. III. IV. Chemiluminescent reactions, I, 34; II, 25.
and Jones, D. G., *cis*-azo-compounds. II, II, 473.
- Jones, D. G., and Polya, J. B., *cis*-azo-compounds. III. Absorption spectra, I, 507.
- Cook, C. A. See De Beer, E. J.
- Cook, E. B. M. See Brewer, J. H.
- Cook, E. N., use of neoprontosil in infections of the urinary tract, III, 610.
- Cook, E. S., local anaesthetics; relation of chemical structure to physiological action in the aminoester series, III, 615.
- Hart, M. J., and Joly, R. A., effect of 1:2:5:6-dibenzanthracene on growth and respiration of yeast, III, 790.
- and Kreke, C. W., solid from yeast which affects cellular metabolism, III, 606.
- Kreke, C. W., and Nutini, L. G., fractions from yeast which stimulate the respiration of yeast and animal tissues, III, 606.
See also Loofbourow, J. R., and Rider, T. H.
- Cook, G. M. See Mitchell, H. S.
- Cook, James W., carcinogenic chemical agents, III, 282.
and De Worms, C. G. M., polycyclic aromatic hydrocarbons. XX., II, 149.
- Hewett, C. L., and Robinson, (Mrs.) A. M., stereochemistry of *as*-octahydrophenanthrene, II, 103.
- Martin, R., and Roe, (Miss) E. M. F., photo-oxides of carcinogenic hydrocarbons, II, 413.
- Robinson, (Mrs.) A. M., and Roe, (Miss) E. M. F., polycyclic aromatic hydrocarbons. XIX., II, 158.
See also Badger, G. M.
- Cook, L. C., and Walter, W. G., the electroencephalogram in convulsions induced by cardiazol, III, 34.
- Cook, L. G., investigations on chromium and iron hydroxides and their significance for the emanation method, I, 274.
See also Bretscher, E.
- Cook, M. A. See Harned, H. S.
- Cook, S. F., blood picture of poultry and its diagnostic significance, III, 5.
- Cooke, A. H., and Hull, R. A., experiments on pumping liquid helium to low temperatures, I, 490.
- Rollin, B. V., and Simon, Franz, expansion liquefier for helium, I, 579.
See also Blaisse, B. S.
- Cooke, C. See Southworth, H.
- Cooke, G. W., and Gulland, J. M., palladous chloride as a dehydrogenating agent, II, 307.
- Cooke, J. V., experimental therapy of acute leukemia with extracts of bone marrow, III, 4.
- Cooke, R. See Conway, E. J.
- Cooke, R. A., antigenic relationship of pollens, III, 1091.
- Cooke, R. G., Gillespie, D. T. C., and Macbeth, A. K., cumyl alcohol, II, 17. Epimeric alcohols of the cyclohexane series. I. *cis*- and *trans*-Dihydro-cryptol, II, 260.
and Macbeth, A. K., epimeric alcohols of the cyclohexane series. II. 4-Methyl- and 4-isopropyl-cyclohexylcarbinols, II, 475.
- Macbeth, A. K., and Winzor, F. L., absorption spectra of naturally-occurring naphthaquinones and their derivatives, I, 402.
- Cooke, S. R. B. See Faust, G. T.
- Cooley, R. A., Yost, D. M., and McMillan, E., non-interchange of elementary radio-sulphur with carbon disulphide, I, 623.
- Coolidge, A. S., and James, H. M., wave functions and potential curves for excited H., I, 6.
- James, H. M., and Vernon, E. L., molecular potential curves from spectroscopic data, I, 11.
See also James, H. M.
- Coolidge, T. B., cataphoresis apparatus, III, 420.
- Coomber, D. I., relation between dielectric constants and internal pressures of non-polar liquids, I, 182.
- Coombs, F. S. See Talbott, J. H.
- Coomes, E. A., secondary emission from clean tungsten, I, 2. Total secondary electron emission from tungsten and thorium-coated tungsten, I, 291.
- Coon, A. B., nitritoid crises following tryparsamide therapy, III, 1088.
- Coon, J. M., assay of posterior pituitary extracts, III, 908.
- Coop, I. E., Davidson, N. R., and Sutton, L. E., dielectric polarisation of formic acid vapour, I, 61.
and Sutton, L. E., electric dipole moments of diphenyl ether and derivatives in the vapour phase, and a revision of oxygen valency angle in these compounds, I, 10. Vapour-phase electric dipole moments of thionyl chloride, sulphuryl chloride, dimethyl sulphone, and thiophosgene, I, 302.
- Cooper, D. M., fine structure in the zenith angle distribution of cosmic rays, I, 445.
- Cooper, E. A., polysaccharide synthesis by the bacilli, III, 792.
- Cooper, E. D. See Anderson, T.
- Cooper, F. B., Gross, P., and Lewis, M., chemotherapy of types III and VII pneumococcal infections with sulphanilamide, 4:4'-diacetamidodiphenylsulphone and 4:4'-diaminobenzene-sulphonanilide, III, 303. Sulphapyridine, sulphanilamide, and specific antiserum in experimental type III pneumococcal infections, III, 857. Sulphonamide therapy of experimental peritonitis due to *E. coli*, *B. proteus*, and *B. pyocyaneus*, III, 857. Chemotherapeutic evaluation of sulphanilamide and sulphapyridine in type II pneumococcal infections in mice and rats, III, 858.
See also Gross, P.
- Cooper, F. S., Buchwald, C. E., Haskins, C. F., and Evans, R. D., electron bombardment of biological materials. I. Electron tube for the production of homogeneous beams of cathode rays from 1 to 15 kilovolts, III, 622.
See also Pollock, H. C.
- Cooper, G. See Cole, H. N.
- Cooper, G. R. See Vosburgh, W. C.
- Cooper, K. E., Peters, B. A., Wiseman, J., and Davies, J. M., reduction of potassium tellurite in diphtheria, III, 1101.
- Cooper, L. H. N., salt error in determinations of phosphate in sea-water, I, 97. Phosphate in the English Channel, 1933—38, with a comparison with earlier years, 1916 and 1923—32, I, 106. Re-definition of the "anomaly of the nitrate-phosphate ratio," I, 106. Phosphorus, nitrogen, iron, and manganese in marine plankton, III, 762.
- and Wilson, D. P., formation of native lead under laboratory conditions, I, 286.
- Cooper, M. B. See Wyatt, T. C.
- Cooper, M. L. See Wilson, A. T.
- Cooper, W. C. See Dandliker, W. B.
- Cooper, Z. K., and Schiff, A., mitotic rhythm in human epidermis, III, 225.
- Cope, A. C., and Hancock, (Miss) E. M., introduction of substituted vinyl groups. I. *iso*Propenylalkylmalonic esters. II. (1-Methylpropenyl)alkylmalonic esters. III. (Dialkylvinyl)alkylcyanoacetic esters, II, 5, 48. Substituted vinylbarbituric acids. I. *iso*Propenyl derivatives. II. α -Methylpropenyl derivatives. III. Derivatives containing a dialkylvinyl group having five or more carbon atoms, II, 127, 182, 284.
- Cope, C. L., young chick as test for thyrotropic hormone, III, 137.
- Cope, E. J., and Kasper, J. A., cultural methods for detection of typhoid carriers, III, 632.

- Cope, O., Capnick, I., Lambert, A., Pratt, T. D., and Verlot, M. G., endocrines and amylase. II. Changes in activity of serum-amylase in response to changes in adrenal cortical function in the dog and rabbit. III. Serum-amylase in relation to pituitary, pancreas, and thyroid function, III, 977.
- and Donaldson, G. A., significance of operative techniqu in removal of the pituitary, III, 575.
- Copeland, P. L., secondary emission of electrons from sodium films contaminated by gas, I, 441.
- Copenhaver, J. E. See Goggans, J. F., jun.
- Copley, G. N., modified phase rule equation, I, 80.
- Copley, M. J., and Holley, C. E., jun., hydrogen bonds involving the C-H link. VI. Acetylenic compounds, I, 518.
- Zellhoefer, G. F., and Marvel, C. S., hydrogen bonds involving the C-H link. IV. Effect of solvent association on solubility. V. Solubility of methylene chloride in donor solvents, I, 20.
- Copp, F. C. See Carter, F. D.
- Coppée, G., topography of auditory pathway in medulla oblongata, III, 969.
- Minimal sound frequency difference detectable by cat and rabbit, III, 972.
- and Bacq, Z. M., degeneration, conduction, and synaptic transmission in the cervical sympathetic, III, 371.
- Coppee, M. G., distribution of auditory neurones in mesencephalon, III, 829.
- Coppens, A., and Hoejenbos, L., volatile constituents of raspberry juice (*Rubus idaeus*, L.) and of strawberry juice (*Fragaria eliator*, Ehrh.), III, 884.
- Copperman, M. B., and Meranze, D. R., traumatic fat necrosis, III, 695.
- Copping, A. M., and Korenchevsky, V., physiological action of vitamin-E and consequences of -E deficiency. V. Effect of vitamin-E-deficient diet on weights of organs of male and female rats, III, 1074.
- Coppo, M., and Fenici, A., effect of temperature on oncotic pressure of serum, III, 118.
- Coquoin-Carnot, M. See Carnot, P.
- Corbellini, A., Botrugno, C., and Capucci, F., anomalous decomposition of the tetrazo-derivative of 2:2'-diamino-1:1'-dinaphthyl. IV. Reaction of o-(4:5-1':2'-naphth-3-pyrazolyl)cinnamic acid with thionyl chloride, II, 88.
- Capucci, F., and Tommasini, G., anomalous decomposition of the tetrazo-derivative of 2:2'-diamino-1:1'-dinaphthyl. V. Oxidation of cis-o-naphtho-1':2':4:5-pyrazolyl-3-cinnamic acid, II, 391.
- and Crespi, D., anthanthrone and derivatives. VI. Alkali fusion of anthanthrone, II, 74.
- Ghioldi, C., and Chevallard, F., anomalous decomposition of the tetrazo-derivative of 2:2'-diamino-1:1'-dinaphthyl. VI. Dehydrogenating action of thionyl chloride on an ethylenic double linkage, II, 454.
- and Steffenoni, F., anthanthrone and derivatives. V. Oxidation of 1'-carboxy-10:11-benzbenzanthrone-7, II, 74.
- Corben, H. C., straggling of electrons due to radiation and ionisation loss, I, 169.
- See also Massey, H. S. W.
- Corbet, R. E. See Holmes, H. N.
- Corbin, K. B., and Harrison, F., sensory innervation of spinal accessory and tongue musculature in rhesus monkey, III, 828.
- Corcoran, A. C., rapid desensitisation in a case of hypersensitiveness to insulin, III, 262.
- Helmer, O. M., and Page, I. H., determination of nicotine in urine, III, 844.
- and Page, I. H., diphenylamine in the determination of fructose in biological media. I. Determination of inulin. II. Determination of fructose in small amounts of blood, III, 540.
- Corcoran, D. R. See Scudder, J.
- Cordier, D., and Caux, M., rate of oxidation and of reduction of anoxic blood, III, 968.
- and Français, J., changes in respiratory function of asphyxiated blood. I. Oxygen dissociation curve of asphyxiated blood. II. Role of acidosis and polycythemia in oxygen dissociation curve of asphyxiated blood, III, 366.
- Lévy, R., and Rapkine, L., respiration, III, 365.
- Cordier, G., architecture of the lower end of the femur and upper end of the tibia, III, 345.
- Adsorption of the foot and mouth virus by animal charcoal and tricalcium phosphate; immunisation of guinea-pigs, III, 796.
- Cordier, P., acetonephenylpyruvic [α -hydroxy- γ -keto- α -benzylvaleric] acid and its dehydration product, I, 422.
- Corelli, F., transfusion of blood containing thiosulphate, III, 815.
- Corey, E. L., and Britton, S. W., hypophyseal and adrenal interrelationships and carbohydrate metabolism, III, 1047.
- Corey, R. B. See Albrecht, G.
- Cori, C. F. See Colowick, S. P., and Cori, G. T.
- Cori, G. T., Colowick, S. P., and Cori, C. F., activity of the phosphorylating enzyme in muscle extract, III, 520.
- and Cori, C. F., enzymic breakdown of glycogen in liver extracts, III, 272.
- Cori, C. F., and Schmidt, Günther, rôle of glucose 1-phosphate in the formation of blood-sugar and synthesis of glycogen in the liver, III, 926.
- Cork, J. M., and Curtis, B. R., excitation function for iron by energetic deuterons, I, 443.
- and Lawson, J. L., induced radioactivity in cadmium and indium, I, 546.
- See also Darling, B. T., and Pool, M. L.
- Corkill, A. B., and Nelson, J. F., metabolism of fructose, III, 925.
- Corkill, A. J., and Rosenhead, L., distribution of charge and potential in an electrolyte bounded by two plane infinite parallel plates, I, 562.
- Corkill, N. L., tropical ulcer: treatment and cause, III, 399.
- Corlette, M. B. See Burwell, G. S.
- Corley, R. C. See Neilson, E. K.
- Cormia, F. E., experimental arspenamine sensitisation; reactions to arspenamine in guinea-pigs given staphylococcus toxin, and in guinea-pigs with induced streptococcal infection, III, 90.
- Cornbleet, T., excretion of bromide through the skin, III, 507.
- Cornec, E., and Lehné, M., physico-chemical analysis by determination of eutaxy lines, I, 420.
- Corner, G. W., experimental menstruation-like bleeding due to hormone deprivation, III, 144.
- Corner, H. H., cobalt in control of nutritional anæmia, III, 1025.
- Corner, J., zero-point energy and lattice distances, I, 406.
- Joule-Thomson inversion curves of recent equations of state, I, 410.
- Cornforth, J. W., glycoside of *Persoonia salicina* fruits, III, 950.
- Anthocyanin of *Vitis hypoglauca*, F. v. M., III, 952.
- and Earl, J. C., saponin of *Sarcostemma australe*, R. Br., II, 300.
- Chemical examination of the fruit of *Pittosporum undulatum*, II, 469.
- Fruit of *Pittosporum undulatum*, III, 638.
- Hughes, G. K., and Lions, F., pyrolysis of cyclohexenyl phenyl ether, II, 153.
- Condensation of piperonal with succinic acid derivatives, II, 478.
- Hughes, G. K., Lions, F., and Harradence, (Miss) R. H., indoles. V. Coumarono-(3,2-b)indole and derivatives, II, 187.
- Cornil, L., local atrophy of fat tissue after insulin injections, III, 50.
- Bertrand, G., Schachter, M., and Volpato-Bertrand, A., parental injection of mammary extracts for uterine hæmorrhage, III, 1055.
- Dunan, J., and Vague, J., ratio between creatine metabolism and chloride and acid-base equilibrium, III, 296.
- and Malméjac, J., sub-maxillary secretion of saliva produced by histamine, III, 311.
- Paillass, J. E., and Haimovici, H., lesions of lumbar sympathetic chain following experimental arterial inflammation of hind foot of dog, III, 967.
- Paillass, J. E., and Rosanoff, H., hypoplasia of islets of Langerhans following testosterone injections, III, 384.
- Poursines, Y., and Giraud-Costa, E., myelolytic effect of saponin, III, 375.
- and Rosanoff, H., effect of testosterone on blood-sugar, III, 384.
- See also Chevallier, A.
- Cornog, R. See Alvarez, L. W.
- Cornubert, R., André, M., and De Demo, M., stereochemistry of cyclanes. VIII. 2:6-Dibenzyl- and dihexahydrobenzyl-cyclohexanones, II, 164.
- André, M., De Demo, M., Joly, R., and Strébel, A., stereochemistry of cyclanes. VII. Stereoisomeric di-alkylcyclanones and spatial structure of their oximes, II, 164.
- André, M., and Joly, R., stereochemistry of cyclanes. X. Di-p-methylbenzyl-cyclo-pentanones, -hexanones, and -heptanones, II, 165.
- Borrel, C., and Maurel, A., stereochemistry of cyclanes. XI, II, 165.
- De Demo, M., Joly, R., Louis, P., and Strébel, A., stereochemistry of cyclanes. V. Stereoisomeric dibenzylidene derivatives, II, 70.
- De Demo, M., Joly, R., and Strébel, A., stereochemistry of cyclanes. IX. 2:5-Dibenzyl- and dihexahydrobenzyl-cyclopentanones, II, 164.
- Joly, R., and Strébel, A., stereochemistry of cyclanes. VI. Stereoisomeric dibenzylidenecycloheptanones; action of ultra-violet rays on diarylidene-cyclanones, II, 70.
- and Morelle, G., probable existence of three 2:6-dibenzylcyclohexanones, II, 324.

- Cornwell, W. S. See Kimura, G.
- Corper, H. J., and Cohn, M. L., effects of tuberculo-protein, III, 631.
- Corput, J. G. van der, and Backer, H. J., reaction velocity of mixtures. I. Bi-molecular reactions of two mixed substances with a third substance, I, 202.
- Corr, P., and Root, R. N., death from granulocytopenia after sulphanilamide, III, 859.
- Corran, H. S., Dewan, J. G., Gordon, A. H., and Green, D. E., xanthine-oxidase and milk flavoprotein, III, 1096.
- and Green, D. E., flavoprotein from cows' milk, III, 156.
- Green, D. E., and Straub, F. B., catalytic function of heart flavoprotein, III, 719.
- See also Straub, F. B.
- Correa, R. M. E., cytology of the myocardium and auriculo-ventricular conducting system [in the dog], III, 557.
- Correll, J. T., and Wise, E. C., relative efficiency of vitamin-D from several sources. I. Influence on bone-ash and body-weight of the chicken. II. Influence on serum-phosphatase of the chicken, III, 169.
- Correns, A. E., vitamin-C content of human and cows' milk in summer, III, 995.
- Correns, C. W., and Engelhardt, W. von, weathering of potash-felspar, I, 47.
- Corruccini, R. J., and Gilbert, E. C., heat of combustion of *cis*- and *trans*-azobenzene, I, 613.
- See also Hughes, A. M.
- Corry, D. C., Brewer, A. C., and Nicol, C., peritonitis treated with sulphanilamide, III, 1082.
- Corse, J. See Fuson, R. C.
- Corson, B. B., absorption efficiency of spiral gas-lift wash-bottle, I, 105.
- and Ipatiev, V. N., simultaneous dehydrogenation-hydrogenation of cyclohexene in presence of nickel, II, 305.
- Corson, D. R., and Thornton, R. L., disintegration of uranium, I, 234.
- Corson, J. F., pathogenicity for white rats of a strain of *Trypanosoma rhodesiense*, III, 327.
- Cortegiani, E., formation of acetylcholine in brain *in vitro* in presence of methylcne-blue and cobra venom, III, 1038.
- Carayon-Gentil, A., Gautrelet, J., and Kaswin, A., complex precursor of acetylcholine. I and II, III, 776.
- See also Gautrelet, J., and Mentzer, M. C.
- Cortesi, R. See Chodat, F.
- Corwin, W. See Thompson, J. H.
- Corwin, W. C., decreased resistance to hypoglycemia on successive days of administration of insulin, III, 681.
- Effect of stellate ganglionectomy on carbohydrate metabolism and on hypoglycemic convulsions caused by administration of insulin, III, 909.
- See also Flock, E. V.
- Coryell, C. D., existence of chemical interactions between the hemes in ferri-haemoglobin (methaemoglobin) and the rôle of interactions in the interpretation of ferro-ferrihaemoglobin electrode potential measurements, I, 611.
- See also Stitt, F., and Young, W. G.
- Coryn, G., influence of the endocrine glands on dividing cartilage, III, 347.
- Cosmann, O. See Büssem, W.
- Cossa, Augier, and Rivoire, investigation of induced hyperglycemia in tumours of the hypophysis, III, 905.
- Cossio, P., and Bereonsky, I., cyanosis in mitral stenosis, III, 558.
- Costa, A., and Masuelli, L., effect of vitamin-B₁ and -B₂, especially on carbohydrate metabolism, III, 286.
- Coste, F., and Metzger, J., vitamin-B₁ in treatment of pain, III, 164.
- Costeanu, G., and Renaud, P., action of water on sodium, copper, and mercury, I, 379.
- See also Barchewitz, P.
- Costeanu, N. D., micro-detection and -determination of lead, I, 39. Microchemical detection and determination of silver with the aid of filter-papers impregnated with reducing solutions, I, 216.
- Coster, D., and Levi, H., fine structure of X-ray absorption K-edge of α -, β -, and γ -iron, I, 113.
- and Zanten, P. G. van, effect of thermal agitation on intensity of reflexion of cathode rays from crystals, I, 113.
- Cosyns, H., comparative absorption curves of ferrous and ferric salts, III, 765.
- Cotelle, (Mme.) S., and Lacassagne, A., unequal permeability to polonium of various organs, III, 156.
- and Winand, L., activity of mesothorium free from radium, I, 395.
- See also Hulubei, H.
- Cotoni, L., and Floch, H., differential diagnosis of pneumococci, streptococci, and enterococci, III, 630.
- and Pochon, J., toxic extracts of streptococci in animal serum, III, 430.
- Cotter, E. F. See Goodpasture, E. W.
- Cottet, J. See Chabrol, E., and Loeper, M.
- Cotti, L., bone marrow function, III, 890.
- Cottington, F., and Gavigan, A. J., metrazol treatment of depressions, III, 902.
- Cottle, D. L. See Golumbic, C.
- Cottman, E. W., photography of chemiluminescence, I, 580.
- Cotton, A., cellular division in a magnetic field, III, 869.
- Cotton, A. G. See Houston, J.
- Cotton, F. S., short cut in gas analysis, I, 582.
- Cotton, W. E., Buck, J. M., and Smith, H. E., communicability of infectious abortion between swine and cattle, III, 202.
- Co-Tui, F. W., Benaglia, A. E., Ruggiero, W. F., and Yates, A. L., fever-producing principle in typhoid vaccine, III, 1104.
- Couch, J. F., lupine. XIII. Octalupine, an alkaloid from *Lupinus sericeus*, var. *flexuosus*, C. P. Smith, II, 456.
- and Briese, R. R., cyanogenesis in *Liriodendron tulipifera*, L., III, 215.
- Destruction of hydrocyanic acid by prunase and influence of sugars on the reaction, III, 723. p_R and cyanogenesis in sorghum, III, 881.
- Briese, R. R., and Martin, J. H., hydrocyanic acid content of sorghum varieties, III, 638.
- See also Briese, R. R., and Martin, J. H.
- Couch, J. R., Fraps, G. S., and Sherwood, R. M., vitamin-D requirements of growing chicks as affected by the calcium content of the ration, III, 77.
- Couder, A., and Jacquinet, P., observation of radiations of low intensity in the neighbourhood of a bright spectrum line, I, 393.
- Coujard, C. See under Coujard-Champy, C.
- Coujard, R. See Champy, O.
- Coujard-Champy, C. See Champy, C.
- Coulouma, P. See Worms, G.
- Coulson, C. A., electronic structure of polyenes and aromatic molecules. VII. Bonds of fractional order by the molecular orbital method, I, 243.
- See also Lennard-Jones, J. E.
- Coulson, E. J., and Stevens, Henry, sensitisation of guinea-pigs to cotton linters and house dust extracts, III, 1006.
- Coulter, L. V. See Slansky, C. M.
- Coulthard, C. E., destruction of bacterial spores; low-temperature sterilisation, III, 337.
- Countiss, E. H., granulosa-cell tumour of the ovary, III, 381.
- Coupechoux, M., organic reineckates, II, 535.
- Couper, M. See Lutz, R. E.
- Courmont, P., Morel, A., and Pèrier, E., *in vitro* anti-fertilising action of arylsulphonamides on homogeneous cultures of Koch's bacillus, III, 331.
- Courrier, R., and Dognon, A., concentration of gonadotropic substances in urine by froth method, III, 1054.
- and Gros, G., effect of oestradiol on the male cat and monkey, III, 56.
- and Jost, A., quantitative analysis of endocrinology of gestation in rabbit, III, 980. Maintenance of pregnancy in ovariectomised rabbit with pregnenolone, III, 981. Androgenic action of pregnenolone, III, 984.
- Court, D., and Edward, D. G., monocytic leukaemia in childhood, III, 959.
- Courtade, R. See Descazeaux, J.
- Courtener, A. See Alexandrov, B.
- Courtice, F. C., Douglas, C. G., and Priestley, J. G., carbohydrate metabolism and muscular exercise, III, 772.
- Courtois, G., fusibility of mixtures of pure anhydrous sodium sulphide and sulphate, I, 145. Fusibility of mixtures of pure anhydrous sodium sulphide and carbonate, I, 145. Preparation of anhydrous sodium sulphide, I, 153.
- Courtois, J., synthetic activity of renal phosphatase, III, 99. Hydrolysing and synthetic action of kidney-phosphatase in glycerol medium, III, 324. Comparative hydrolysis of α - and β -glycerophosphoric acids by vegetable phosphatases. VI. Phosphatase of white mustard seed. VII. Phosphatase of sweet almond. VIII. Takadiastase, III, 324, 625. Diastase reactions and chain reactions, III, 519. Action of plant phosphatases on α - and β -glycerophosphate, III, 788. Synthetic action of almond-phosphatase, III, 723.
- and Bonjean, P., determination of sulphate in waters by the volumetric chromate method, I, 624.
- and Denis, P., specificity and action of sweet-almond phosphatase. I. Action on *n*-propyl and isopropyl phosphates, III, 941.
- and Manouvrier, J., action of almond phosphatase on monophosphoric esters, III, 872.
- See also Fleury, P.
- Courtot, C., and Kroustein, J., bisdiphenylene-ethylene series, II, 308.
- Couturier, P. L., action of mixed organo-magnesium derivatives on hydroxybenzamides: the phenolic ketones produced, II, 115.
- Covaerts, P., mechanism of renal excretion of glucose, III, 595.

- Covello, *M.*, polyiodides in alcoholic solutions of iodine and hexamethyl- α -diaminopropan- β -ol iodide, II, 409. Colorimetric determination of nicotinic acid by 1-chloro-3:4-dinitrobenzene, III, 288. Fission of yeast-nucleic acid by a kidney-phosphatase preparation of high esterase activity, III, 519. Effect of smoking and coffee on urinary excretion of products giving a reaction for nicotinic acid, III, 761. Presence of oxidase in *Pyrethrum cinerariaefolium*, III, 1095.
- Coven, *A. W.*, grid potential in the Neher-Pickering circuit, I, 160.
- Cowan, *D. M.*, Jeffery, *G. H.*, and Vogel, *A. I.*, multipanar structure of the methylcyclohexane ring, II, 305.
- Cowan, *J. H.*, indications for coramine in cardiovascular disease, III, 188.
- Cowan, *R. J.* See Pennyquick, *S. W.*
- Cowan, *S. T.*, classification of staphylococci by slide agglutination, III, 430. Staphylococcal infection in rabbits: antibacterial and non-specific immunity, III, 727.
- Coward, *H. F.*, and Jones, *G. W.*, limits of inflammability of gases and vapours, I, 375.
- Coward, *K. H.*, and Morgan, *B. G. E.*, biological determination of crystalline vitamin-B₁, III, 703.
See also Underhill, *S. W. F.*
- Cowdrey, *G. W.*, and Smith, *Mervyn L.*, bursting of glass tubes by thixotropic pastes, I, 260.
- Cowen, *D.* See Wolf, *A.*
- Cowett, *M.* See De Graff, *A. C.*
- Cowgill, *G. R.*, human requirements for vitamin-B₁, III, 285. Negative effect of chronic morphinism on the anorexia characteristic of vitamin-B₁ deficiency, III, 919.
- and Dann, *M.*, failure of dinitrophenol to influence the vitamin-B requirement, III, 286.
See also Blackie, *W. J.*, Horwitt, *M. K.*, and Street, *H. R.*
- Cowie, *A. T.* See Barcroft, *J.*
- Cowie, *D. B.* See Montgomery, *C. G.*
- Cowles, *P. B.*, alkyl sulphates: their selective bacteriostatic action, III, 306. Germicidal power of alcohols for *B. typhosum* and *Staphylococcus aureus* and its relation to surface tension, III, 307.
- Cox, *E. G.*, and Jeffery, *G. A.*, crystal structure of glucosamine hydrobromide [and α -chitosamine], I, 457.
- Shorter, *A. J.*, and Wardlaw, *W.*, stereochemistry of quadricovalent atoms: thallium, I, 10.
- Cox, *J. R.* See Osol, *A.*
- Coxon, *R. V.*, and Forbes, *J. R.*, agranulocytic angina after M. & B. 693, III, 306.
- Cracas, *L. J.* See Light, *R. F.*, and Schultz, *A. S.*
- Craddock, *F. H., jun.*, and Wilson, *J. C.*, reducing substances of normal urine. I. Effects of insulin injection, III, 153.
- Cramer, *G.*, inflammation of the lungs caused by nitric oxide (nitrous gases), III, 866.
- Craft, *C. B.*, effect of ephedrine on pancreatic secretion, III, 690.
- Crafts, *A. S.*, and Broyer, *T. C.*, migration of salts and water into xylem of roots of higher plants, III, 1108.
- Crafts, *R. C.* See Engle, *E. T.*
- Cragg, *J. B.*, physiology of maturation and fertilisation in *Pomatoceros triquetus* (L.). I. Nature of the material, III, 757.
- Cragg, *R. W.* See Ingle, *D. J.*
- Craig, *D. N.*, and Vinal, *G. W.*, solubility of lead sulphate in solutions of sulphuric acid, determined by dithizone with a photonic cell, I, 195.
- Craig, *J. M.* See Russell, *J. A.*
- Craig, *L. C.*, and Jacobs, *W. A.*, veratrine alkaloids. V. Selenium dehydrogenation of cevine. VI. Oxidation of cevine, II, 459, 490.
See also Jacobs, *W. A.*
- Craig, *N. S.* See Boland, *C. R.*
- Craig, *R.*, and Patton, *R. L.*, micro-conductivity cell of simple design, I, 104.
See also Howell, *D. E.*
- Craig, *R. L.* See Townsend, *S. R.*
- Craig, *W. McK.*, essential hypertension: selection of cases and results obtained by subdiaphragmatic extensive sympathectomy, III, 658.
See also Horton, *B. T.*
- Craige, *A. H., jun.*, scopalamine action in the horse, III, 181.
- Craigie, *E. H.*, vascularisation of the hypophysis in tailed amphibians, III, 44. Vascular connexions of hypophysis in leopard frog (*Rana pipiens*), III, 1022.
See also Taylor, *S. J.*
- Craik, *K. J. W.*, sensory adaptation and mechanism of vision, III, 838.
- Rawdon-Smith, *A. F.*, and Sturdy, *R. S.*, transient response of primitive ear, III, 838.
- Cram, *S. W.* See Winans, *J. G.*
- Cramer, *A. B.*, and Hibbert, *H.*, lignin and related compounds. XLV. Synthesis and properties of α -hydroxypropiovanillone, II, 507.
- Hunter, *M. J.*, and Hibbert, *H.*, structure of lignin, II, 29. Lignin and related compounds. XXXV. Ethanolysis of spruce wood. XXXVI. Ethanolysis of maple wood, II, 172.
See also Hunter, *M. J.*
- Cramer, *F. K.* See Fasciolo, *J. C.*
- Cramer, *H.* See Schlomka, *G.*
- Cramer, *H.* (Köln), diffusion through polished and etched copper surfaces, I, 140.
- Cramer, *K. E.* See Rudy, *H.*
- Cramer, *P. L.*, and Glasbrook, *A. L.*, vapour-phase catalytic conversion of methyl-*tert.*-butylcarbinol and *tert.*-butylethylene, II, 136.
- Cramer, *W.*, and Horning, *E. S.*, hormonal relationship between ovary and adrenal gland, III, 261.
- Crandall, *L. A., jun.*, and Cherry, *I. S.*, effects of insulin and glycine on hepatic glucose output in normal, hypophysectomised, adrenal denervated, and adrenalectomised dogs, III, 771.
- Chesley, *F. F.*, Gray, *R. E.*, and Robinson, *H. E.*, effect of chondroitin-sulphuric acid on gizzard erosion and growth in chicks, III, 498.
See also Cherry, *I. S.*, and Robinson, *H. E.*
- Crandall, *W. D.*, influence of ovarian hormones on hyperplasia by mitosis in the rabbit uterus in early pregnancy, III, 585.
- Crane, *H. R.*, beryllium targets, I, 104. Absorption of neutrinos, I, 237.
- and Halpern, *J.*, creation of pairs or positrons by fast electrons, I, 348. Recoil of the nucleus in β -decay, I, 505.
See also Halpern, *J.*, Oleson, *N. L.*, and Turin, *J. J.*
- Crane, *N. F.* See Stewart, *H. J.*
- Cranedonk, *A. C.* See Waterman, *H. I.*
- Cranefod, *A.* See Zaeper, *G.*
- Cranston, *E. M.* See Bieter, *R. N.*
- Craven, *C. J.* See Barr, *E. S.*
- Crawford, *B. L., jun.*, Raman spectrum and vibrational frequencies of methylacetylene, I, 180. Infra-red and Raman spectra of polyatomic molecules. IX. Dimethylacetylene, C₃H₆, I, 549.
- Avery, *W. H.*, and Linnett, *W.*, infra-red and Raman spectra of polyatomic molecules. III. Ethane, I, 8.
- and Edsall, *J. T.*, infra-red and Raman spectra of polyatomic molecules. VI. Triborine triamine, I, 299.
- and Joyce, (*Miss*) *L.*, infra-red and Raman spectra of polyatomic molecules. VIII. Dimethyl ether, I, 354.
- Kistiakowsky, *G. B.*, Rice, *W. W.*, Wells, *A. J.*, and Wilson, *E. B., jun.*, entropy and heat capacity of propylene, I, 602.
- and Rice, *W. W.*, internal rotation in dimethylacetylene, I, 409.
- Crawford, (*Miss*) *H. M.*, β -benzoyl- α -diphenylpropionic [γ -keto- α - β -triphenylbutyric] acid, II, 68. Diphenylnaphthalenes, II, 206.
- Crawford, *J. H.*, pneumococcal pneumonia complicating pulmonary tuberculosis treated with M. & B. 693, III, 503.
See also Digregorio, *N. J.*, and Gubner, *R.*
- Crawford, *M. D.*, effect of labour on plasma-uric acid and -urea, III, 980.
- Crawford, *T.*, case of Morquio's disease, III, 887.
- Crawley, *B.*, and Griffith, *R. H.*, hydro-generation of simple sulphur compounds. III. Reactions of carbonyl sulphide and methylthiol, I, 87.
- Crawshaw, *J. D.*, cosmic-ray showers produced under 30 m. of clay, I, 5.
- Craxford, *S. R.*, Twigg, *G. H.*, and Rideal, *E. K.*, catalytic exchange of deuterium and hydrogen in hydrocarbons, I, 329.
- Crecca, *W. D.*, and Cacciarelli, *R. A.*, full-term abdominal pregnancy with recovery of both mother and baby, III, 382.
- Creech, *E. M. H.*, carcinogenic and related non-carcinogenic hydrocarbons in tissue culture. I, III, 697.
- Creech, *H. J.* See Franks, *W. R.*
- Creed, *R. H.* See Morton, *R. A.*
- Creer, *W. S.*, feet of industrial worker; relation to footwear, III, 619.
- Crehange, *J. L.* See Spillmann, *L.*
- Creighton, *M. M.* See Anderson, *R. J.*
- Cremer, *E.*, self-diffusion in liquid hydrogen, I, 249. Effect of starvation on composition of fat tissue, III, 918.
- and Flüge, *S.*, adsorption at surfaces with frozen thermal equilibrium of the active spots, I, 139.
- Crepaz, *E.*, stability of stannous oxide, I, 381.
- Crescitelli, *F.*, and Jahn, *T. L.*, electrical response of the dark-adapted grasshopper eye to various intensities of illumination and to different quantities of light, III, 376. Effect of temperature on electrical response of grasshopper eye, III, 1041.
See also Jahn, *T. L.*
- Creskoff, *A. J.*, and Fitz-Hugh, *T., jun.*, response to liver extract of experimentally induced (typhoid) anaemia in rabbits, III, 351.
See also Dohan, *F. C.*
- Crespi, *D.* See Corbellini, *A.*

- Crespolani, E., separation of copper from cadmium, I, 625.
- Cressman, R. D., and Blalock, A., experimental hypertension; kieselguhr injection and splanchnic stimulation, III, 896. Effect of pulse on flow of lymph, III, 1033.
- Creutz, E. C., resonance scattering of protons by lithium, I, 349.
See also Fox, J. G., and White, M. G.
- Creutzfeldt, H. G., and Riebler, R., tumour cells in cerebrospinal fluid (C.S.F.), III, 375.
- Creveld, S. van, and Linde, H. M. van der, cardiomegalia glycogenica circumscripta, III, 500.
See also Bendien, W. M.
- Crew, F. A. E., biological pregnancy diagnosis tests, III, 588.
and Auerbach, C., rex: a dominant autosomal monogenic coat texture character in the mouse, II, 1023.
and Munro, S. S., gynandromorphism and lateral asymmetry in birds, III, 60.
- Crew, R. S. See Hanes, W. J.
- Crews, S. K., and Smith, E. Lester, ultraviolet absorption of calciferol, I, 548.
- Criegee, R., and Plate, K. H., rate of pinacolin isomerisation of two *cis-trans*-isomeric pinacols, II, 111.
- Crile, G., decapsulation of kidney in the course of coeliac ganglionectomy for essential hypertension, III, 1032.
- Crimm, P. D., and Short, D. M., oral typhoid vaccination as measured by blood serum agglutinins, III, 333.
- Crinò, S., and Lenzi, S., effect of nicotinic acid on carbohydrate metabolism and blood picture, III, 767.
- Crippa, G. B., and Caracci, R., anthraquinone group. I. 1-Amino-2-anilomethylanthraquinone. II. Phthaloylation, II, 181, 379. Action of phenylacetic acid on azo-compounds, II, 309.
- and Maffei, S., biochemical catalysts. III. Decrease of peptic albuminolysis *in vitro* under the influence of substituted phenols. IV. Urea as an activator of proteolysis by pepsin, III, 787, 871.
- Criscola, M. See Hagiesco, D.
- Crismon, C. A., and Tainter, M. L., comparative pressor efficiency of sympathomimetic amines in the normal state and in decerebrate shock, III, 860.
- Crismon, J. M., and Tainter, M. L., action of sympathomimetic amines on the heart-lung preparation, III, 84.
- Crist, R. H., and Brown, F. B., greaseless high-vacuum valve, I, 494.
and Wertz, J. E., kinetics of the oxidation of hydrogen sensitised by nitrogen dioxide, I, 568.
See also Matthews, F. L.
- Cristol, P., and Fourcade, J., diamino-acids and diamino-acid polypeptides in normal and pathological blood, III, 961. Rôle of [serum]-polypeptides in the composition of the "double nitrogen," III, 961. Action of permuteite on non-protein nitrogenous substances of blood in aqueous and trichloroacetic acid solution, III, 962.
- Critchfield, C. L., spin-dependence in the electron-positron theory of nuclear forces, I, 595.
See also Bethe, H. A., and Wigner, E. P.
- Critchley, M., spastic dysphonia ("inspiratory speech"), III, 665.
- Crittenden, E. C., jun., and Bacher, R. F., nuclear isomerism in rhodium, I, 54.
- Crittenden, P. J., stability of picrotoxin solutions, III, 615.
- Croatto, U. See Zintl, E.
- Crocetta, A. See Agnoli, R.
- Crocker, E. S. See Duncan, D.
- Croft, C. C., and Black, L. A., yeast-like fungi isolated from normal skins, III, 200. Biochemical and morphological methods for the isolation and identification of yeast-like fungi, III, 200.
- Croll, J. M. See King, J. D.
- Crombie, D. M. R. See Miller, H. G.
- Crombie, D. W., and Hambleton, A., value of correcting the red cell sedimentation rate for effect of cell volume, III, 116.
- Cromwell, N. H. See Thomsson, A. F., jun.
- Cronjé, J. See Jostes, F.
- Cronkite, E. P. See Karnofsky, D.
- Crook, G. W. See Winters, M.
- Crooke, A. C., histological changes in the pituitary gland of subtotally hypophysectomised rats, III, 45.
and Gilmour, J. R., effect of hypophysectomy on the growing rat; histological changes in adrenal, thyroid, and testicle, III, 45.
- Crooks, G. C. See Braun, C. E.
- Crookshank, H., iron ores of the Bailadila range, Bastar State, I, 286.
- Crosby, W. H., vasoconstrictor action of cocaine, III, 505.
- Crosca, A. See Marino, S.
- Crosman, A. M., and Charipper, H. A., polylobation of the polymorphonuclear neutrophil as a result of work and time ageing, III, 227.
- Cross, F. B. See Webster, J. E.
- Cross, J. M. See Shriner, R. L.
- Crossley, M. L., Northey, E. H., and Hultquist, M. E., sulphanilamide derivatives. IV. N^2N^4 -Diacyl- and N^2 -acyl-sulphanilamides, II, 542.
- Crouch, J. E., seasonal changes in testes of the passerine bird, *Phainopepla nitens lepida*, III, 1056.
- Crouch, R. L., and Thompson, J. K., efferent fibres of the thalamus of *Macacus rhesus*, III, 31. Termination of the brachium conjunctivum in the thalamus of the macaque monkey, III, 372. Autonomic functions of the cerebral cortex, III, 667.
- Crow, J. F. See Cumley, R. W.
- Crowden, G. P., body temperature control and physiological reactions during muscular work in gas-protective clothing, III, 94.
and Angus, T. C., control of indoor environment by air conditioning with special reference to the tropics, III, 315.
- Crowder, J. A. See Buehrer, T. F.
- Crowell, W. R., iodometric determination of copper; selection of a suitable buffer solution, I, 278.
See also Benedetti-Pichler, A. A.
- Crowfoot, D., protein molecule, III, 785.
- Crowley, P. G., and Robinson, (Sir) R., experiments on the synthesis of substances related to the sterols. XXIV. Some derivatives of 2-keto-1:2:3:4-tetrahydronaphthalene, II, 72.
- Crowther, C., nutrition and reproduction, III, 160. Rôle of food fat in nutrition, III, 397.
- Crowther, J. A., and Liebmann, H., effect of γ -radiation on ovalbumin, III, 718.
- Liebmann, H., and Jones, R., action of X-rays on electrophoretic mobility of colloid particles, I, 470.
- Croxatto, H., Huidobro, F., Croxatto, R., and Salvestrini, H., choline-esterase activity of venous blood during direct or indirect muscular stimulation, III, 566.
- Croxatto, R. See Croxatto, H.
- Crozier, W. J., temperature and critical intensity for response to visual flicker. II., III, 574.
and Holway, A. H., theory and measurement of visual mechanisms. I. Visual discriminometer. II. Threshold stimulus intensity and retinal position, III, 375.
and Wolf, E., duplexity theory of visual response in vertebrates. II., III, 254. Specific constants for visual excitation, III, 254. Flicker response contours for genetically related fishes. II., III, 574. Temperature and critical illumination for reaction to flickering light. III. Sunfish. IV. *Anax* nymphs, III, 574, 1043. Temperature and the critical intensity for response to visual flicker. III. Theory of visual response contour and nature of visual duplexity, III, 837. Specific constants for visual excitation. IV. Nature of genetic differences, III, 837.
- Wolf, E., and Zerrahn-Wolf, G., flicker response function for the turtle *Pseudemys*, III, 375. Flicker response contour for the isopod *Asellus*, III, 574.
- Cruaud. See Martin, P. E.
- Cruickshank, D. B., human cancer and theory of "cancer phage," III, 395.
- Cruickshank, J. C., chemotherapy of experimental anthrax infection, III, 1082.
- Cruickshank, J. H., Raistrick, H., and Robinson, (Sir) R., chemistry of *Aspergillus* colouring matters. II., II, 82.
and Robinson, (Sir) R., synthesis of derivatives of quinol related to dihydroflavoglaucin, II, 58.
- Cruickshank, R., and Godber, G. E., aerial spread of streptococcal infections, III, 630.
- Cruikshank, E. M., Houston, J., and Moore, T., spectroscopic changes in fatty acids. V. Effect of dietary fat on body- and egg-fat of the hen, III, 1066.
- Crum, G. E. See MacLachlan, W. W. G.
- Crut, G., coagulation of fibrinogen by thrombin in presence of alkali fluorides; inversion of Quick's relationship, III, 959. Action of intravenously injected thrombin in dog, III, 960.
- Crzellitzer, R. See Sabalitschka, T.
- Csato, T., Wetzler-Ligeti, C., and Wiesner, B. P., development of malignancy in animals and changes in restropic activity of blood, III, 846. Effect of prolonged administration of 1:2:5:6-dibenzanthracene on reticulo-endothelial system of rabbits, III, 846.
- Csépai, C., can lead poisoning cause gastroduodenal ulcers? III, 188.
- Culbertson, J. L., and Weber, M. K., densities of fine powders. II., I, 15.
- Culbertson, J. T., phagocytosis of trypan-blue in rats of different age groups [in relation to immunity], III, 522. Age-resistance against trypanosome infections; [efficacy of germanin], III, 775.
- and Molomnt, N., infection with *Trypanosoma lewisi* in the hypophysectomised rat, III, 44.
See also Zwemer, R. L.

- Culey, A. G., heavy minerals in coal measures of New South Wales, I, 542.
- Cullen, G. E. See Wilson, A. T.
- Cullen, S. C., and Rovenstine, E. A., sodium thioethamyl anaesthesia, III, 314.
- Culler, E. A. See Ades, H. W., and Mettler, F. A.
- Culley, A. W. See Greey, P. H.
- Cullinane, N. M., Rees, A. G., and Plummer, C. A. J., analogous organic derivatives of sulphur, selenium, and tellurium, II, 132.
- Culmer, C. U., Atkinson, A. J., and Ivy, A. C., depression of gastric secretion by anterior pituitary-like fraction of pregnancy urine, III, 678.
- Culp, T. See Barret, H. P.
- Cultrera, R., nitrogen metabolism of plants, III, 339.
- Culver, L. R. See Benjamin, J. E.
- Cumings, J. N., determination of potassium and the potassium content of normal voluntary muscle, III, 735.
- Cumley, R. W., Crow, J. F., and Griffen, A. B., clearing specimens for demonstration of bone, III, 545.
- Cumming, H. See Laymon, C. W.
- Cumming, H. S., official control of vitamin-active products and the regulations relative to the sale in the United States, III, 284. Rickets in the United States, III, 291.
- Cummings, J. N., potassium content of human muscle, III, 748.
- Cuneo, B., and Jomain, J., treatment of prostatic hypertrophy by testicular extract, III, 51.
- Cunningham, A. A., pneumococcal meningitis treated with sulphanilamide and M. & B. 693, III, 81.
- Cunningham, B. See Hooker, C. W.
- Cunningham, G. See Krahulik, L.
- Cunningham, R. M. See Patterson, T. S.
- Cunningham, R. W., and Bieter, R. N., potentiation of procaine spinal anaesthesia in rabbit, III, 933.
- Cuny, L. See Gayet, R.
- Cupples, H. L., wetting and spreading properties of aqueous solutions: mixtures of sodium carbonate with *n*-hexane, *n*-octane, *n*-decanoic, lauric, myristic, and palmitic acids, I, 609.
- Cupps, P. T. See Turner, C. W.
- Cupr, V., local cells on metallic electrodes, I, 148. Polarisation of quinhydrone electrodes, I, 202. 389. Difference effect in passivity phenomena, I, 613.
- and Koutny, O., galvanic cells with composite electrodes, I, 148.
- and Marek, K., potential of a chromium electrode, and its dependence on the acidity of the solution, I, 525.
- Curatolo, A., micro-determination of silver in tissues and biological fluids, III, 922.
- Curb, D. L. See Schwab, E. H.
- Curie, (Hme.) E., and Savitch, P., radioelements formed in uranium and thorium irradiated with neutrons, I, 174.
- Savitch, P., and Da Silva, A., radiation from a substance of period hours formed by irradiation of uranium by neutrons, I, 54.
- Curia, M., phosphorescent glasses: decay of phosphorescence, I, 125.
- Curl, A. L. See Nelson, E. K.
- Curphy, T., and Solomon, S., liver function in pneumococcus pneumonia, III, 271.
- Curran, F. J., fifty cases of bromide psychoses, III, 189.
- Curran, S. C., Dee, P. I., and Petržílka, V., excitation of γ -radiation in processes of proton capture by light elements, I, 171.
- and Petržílka, V., construction of Geiger-Müller counters and their use in coincidence experiments, I, 581.
- and Strothers, J. E., excitation of γ -radiation in the processes of proton capture, I, 546.
- See also Dee, P. I.
- Currence, J. D. See Short, J. J.
- Currie, A. B. See Bolam, T. R.
- Currie, D. W., clinical and veterinary uses of wheat-germ oil and vitamin-E preparations. III. Treatment of habitual abortion, III, 1074.
- Currie, R. See Chown, B.
- Currier, L. W., regional granitisation and metamorphism in New England, I, 344.
- Curry, J., and Hazelton, C. L., solubility of carbon dioxide in deuterium oxide at 25°, I, 20. First thermodynamic ionisation constant of deuterocarbonic acid at 25°, I, 25.
- Curry, R., physiology of the contralto voice, III, 460.
- Curschmann, H., maximal hyperchromia in pernicious anaemia, III, 351. Serum-cholesterol after sea and sun bathing, III, 653. Hypophyseal cachexia, III, 676.
- Curti, R., basic calcium sulphates, I, 154. Thallium metaphosphates, I, 154.
- Curtillet, A., and Curtillet, E., rôle of arterio-venous anastomoses in air emboli, III, 660.
- See also Curtillet, E.
- Curtillet, E., arterio-venous anastomoses, III, 823.
- and Curtillet, A., microscopic study of resorption of air emboli in the rabbit, III, 660. Microscopic study of embolism in the frog, III, 660.
- See also Curtillet, A., and Tournade, A.
- Curtis, A. C., and Kline, E. M., liquid paraffin and blood-carotene in man, III, 357.
- Curtis, A., and Anson, B. J., bilateral double infundibulum of the uterine tube, III, 223.
- Curtis, B. R. See Cork, J. M., and Darling, B. T.
- Curtis, F. C. See Ham, T. H.
- Curtis, G. M., and Puppel, I. D., iodine metabolism in exophthalmic goitre, III, 476.
- See also Matthews, N. L., and Puppel, I. D.
- Curtis, H. J. See Cole, K. S.
- Curtis, L. See Scott, A. H.
- Curtis, W. L., sulphanilamide in tularemia, III, 1089.
- Curtiss, E. F., portable Geiger counter unit, I, 160. Detection of radioactive contamination, using Geiger-Müller counters, I, 538.
- Cushman, and Butler, A. M., use of cyanide in determination of ascorbic acid, III, 403.
- Cusick, P. L., Foster Kennedy syndrome associated with a tumour of the cerebellum, III, 240.
- See also Harrell, W. E.
- Cusmano, action of nitric acid on phenylacetone, II, 454.
- and Mazzari, S., action of nitric acid on ethyl α -phenylacetoacetate, II, 38.
- and Sigillo, G., action of nitric acid on diphenacyl, II, 38.
- See also Arella, T.
- Custo, E. L., modifications due to the sympathicolytic agents, piperidinomethylbenzodioxan (933 F.) and atropine, in the effect of electrical stimulation of the pituitary gland on the sexual apparatus of rabbits, III, 378.
- Čuta, F., and Kámen, K., titration of carbonates by Warder's method, with a protective layer of liquid, I, 215.
- Cuthbert, F. P. See Bussabarger, R. A., and Gray, J. S.
- Cuthbertson, A. C., Gee, G., and Rideal, E. K., polymerisation of vinyl acetate, I, 377.
- Cuthbertson, D. P., McGirr, J. L., and Robertson, J. S. M., effect of bone fracture on metabolism of rat, III, 924.
- and Munro, H. N., relationship of carbohydrate to protein metabolism. I. Roles of total dietary carbohydrate and surfeit carbohydrate in protein metabolism, III, 299.
- Cuthbertson, W. F. J., and Drummond, J. C., Shute's serum test for vitamin-E deficiency, III, 1075.
- Cutler, H. H., effects of sucrose on kidney, III, 915.
- Power, M. H., and Wilder, R. M., concentrations of sodium, chloride, and potassium in the plasma and urine of Addison's disease: diagnostic significance, III, 44. Concentrations of chloride, sodium, and potassium in urine and blood: their diagnostic significance in adrenal insufficiency, III, 260.
- Cutler, J. W., Park, F. R., and Herr, B. S., influence of anaemia on blood sedimentation, III, 8.
- Cutler, W. O., and Peat, S., derivatives of methylated glucosamine, II, 144. Synthesis of glucosamine, II, 302.
- Cutter, H. B. See Merritt, L. L., *jun*.
- Cutting, R. A., and Koppányi, T., effect of intravenous infusion on barbiturate narcosis, III, 313.
- Larson, P., and Lands, A. M., effect of diuresis on excretion of glucose in the normal dog during constant glucose infusion, III, 391.
- Cutting, W. C., changes in growth and function of thyroid after thyrotropic stimulation, III, 973.
- and Lewis, M. R., failure of the anterior pituitary to produce hormones in tissue culture, III, 46.
- and Robson, G. B., refractociness from pituitary thyrotropic extracts, III, 677. Effects of various agents on metabolic rate in experimental hyperthyroidism, III, 933.
- See also Emerson, K., *jun*, and Marshall, E. K., *jun*.
- Cutting, W. L. See Marshall, E. K., *jun*.
- Cutler, T. D., relation of leucocytosis to ascorbic acid requirements, III, 113.
- Cutts, M., Gormly, C. F., and Burgess, A. M., treatment of lobar pneumonia with sulphapyridine, III, 928.
- Gregory, A. K., and West, E. J., pneumococcal meningitis successfully treated with sulphapyridine, III, 858.
- Cutler, R. F., salting-out in macrochemical reactions: system antipyrine-water-sodium chloride, I, 81.
- Cuyler, W. E. See Hamblen, E. C., McCullagh, D. R., and McCullagh, E. P.
- Cyrus-Sobolewski, L. See Jicko, W. F.

- Czarnecki, B., effect of acidosis and alkalosis on lymph formation, III, 967.
- and Rubinstein, M., effect of ergotamine on hyperthermic action of dinitrophenol, III, 930. Effect of ergotamine on hyperthermic action of adrenaline, III, 977.
- See also Baginski, S.
- Czerski, L. See Staronka, W.
- Czimmer, A. G. See Jeney, A. von.
- Czochralski, and Przyjemski, E., recrystallisation diagram of antimony, I, 600.
- Czornodola, J. See Kemula, W.
- D.
- Dacey, J. R., and Coffin, C. C., thermal decomposition of methylene diacetate, ethylidene diacetate, and paracetaldehyde at low pressures, I, 275.
- McIntosh, R. L., and Maass, O., persistence of liquid structure in the critical region, I, 410.
- See also McIntosh, R. L.
- Dachá, U. See Lippmann, E.
- Dachs, R. See Fricke, R.
- Dack, S. See Master, A. M.
- Da Costa, E. See Hoelzel, F.
- Da Cruz, A., enzyme activity of the liver of young animals, III, 272.
- See also Jacobsohn, K. P.
- De Cruz, P. G., and Liberalli, C. H., [pharmacognosy of] *Mikania hirsutissima*, DC., III, 312.
- Da Cunha, A. M., and Diaz, E., preparation of a stable antigen for the fixation of the complement reaction in leishmaniasis, III, 426.
- Da Cunha, D. P., and Jacobsohn, K. P., placental enzymes; presence of aconitase in placenta, III, 940.
- Dadajan, A. T., and Pumper, E. J., absorption of supersonic waves in air and argon, I, 189.
- Daddi, G. See MacLeod, C. M.
- Dael, F., Fajerman, H., and Putte-van Hove, van de, distribution of radium in animals after injection, III, 717.
- Dael, J., effects of piperidinemethylbenzodioxan (F. 933), diethylaminomethylbenzodioxan (F. 943), phenoxydimethylaminoethane (L. 407), and methoxyphenoxyethanolaminoethane (L. 416) on the isolated uterus, III, 413.
- See also Handovsky, H.
- Daffern, R. P. See Ashworth, M. R. F.
- Dafise, W. A., chorionepithelioma following ectopic gestation, III, 913.
- Dais, F. S. See Schrell, W. H.
- Darley, S., and Himselwood, C. W., physicochemical aspects of bacterial growth. I. Dependence of growth of *Bact. aerogenes* on concentration of mercuric. II. Quantitative dependence of the growth rate of *Bact. lactis aerogenes* on the carbon dioxide content of the gas atmosphere. III. Influence of alcohol on the growth of *Bact. lactis aerogenes*, III, 201.
- Daruz, H., hypovitaminosis-C, III, 763.
- Darberg, G., rare defects in human populations with particular regard to inbreeding and isolate effects, III, 40.
- Dahlström, G., and Swennum, A., unmyelinated nerve fibres in posterior spinal roots, III, 866.
- Dallmann, R. K. See Henderson, J. E.
- Dahr, blood groups of anthropoid apes, III, 7. Occurrence of anti-O (α_2) agglutinins, III, 649. Inheritable blood factor P, III, 814.
- and Lindau, H., blood groups in anthropoids, III, 451.
- Dalley, B., and Felsing, W. A., partial vapour pressure of aqueous ethylamine solutions, I, 613.
- Dain, B., Baschtavenko, V., and Schwarz, A., auto-oxidation of oxalates, and so-called active oxalic acid, I, 153.
- Dainow, J., and Zimmet, D., localised avitaminosis-O produced by aromatic sulphur compounds, III, 853.
- Dains, and Krober, O. A., syntheses of 2-thio-4-arylthiazolines, II, 455.
- Dainton, F. S. See Norrish, R. G. W.
- Daiser, K. W., total serum-cholesterol and red count in pregnancy, III, 554.
- Daker, W. D., and Stacey, M., polysaccharides. XXX. Polysaccharide produced from sucrose by *Betabacterium vermiciforme* (Ward-Meyer), II, Polysaccharide produced from sucrose by *Betabacterium vermiciforme* (Ward-Meyer), III, 102.
- Dakin, H. D., and West, L., hamatopoietic substance in liver, III, 812.
- Dalai, G. A., and Nargund, K., Hoesen condensation with ethylene dicyanide [succinonitrile], II, 267.
- Dalcq, A. M., form and causality in early development, III, 736.
- Dale, H. H., biological standardisation, III, 937.
- Dale, J. See Beamish, P. E.
- D'Alessandro, G., sero-diagnosis of tuberculosis, III, 723.
- and Greco, distribution and constitution of the species-specific lipin antigen in Jensen sarcoma and normal rat organs, III, 434.
- Dallaporta, V., electrical-optical constants in polar liquids, I, 183.
- Dalla Valle, M., and Hollaender, effectiveness of commercial air filters against *B. subtilis*, III, 733. Simple device for sampling air-borne bacteria, III, 723.
- See also Goldman, F. H., and Riley, E. C.
- Dalla Volta, A., blood-proteins and protein equilibrium in old age, III, 119.
- Dallfort, G., pathology of vitamin-C deficiency, III, 293. Pathological responses to vitamin deficiencies, III, 393.
- Dal'Zoo, D. E., fluoride in potable waters of Valsugana (Trentino), I, 828.
- Dal'Magne, M. J. See van.
- Dal'Zach, K. H. See Allen, L. K., and Eri, M. E.
- Dalling, P., disease problems of domesticated animals, III, 277.
- Dalmon, [concentration of] solutions of nitric acid in diethyl ether, I, 217.
- See also Desmarzuz.
- Dalsace, J. See Portes, L.
- Dalson, H. R., and Nelson, crystal-line copper-protein possessing tyrosinase activity, III, 321.
- Daly, E. F. See Eri, L. E.
- Daly, L. de B., perfused lungs of dog, and Marston, rheuma, III, 831.
- See also Mead, P.
- Daly, J., medical treatment of diarrhoeal ulcer, III, 362.
- See also Smith, M. D.
- Dam, H., vitamin-K, III, 497.
- Dam, H., Oelger, A., Olavind, J., Karrer, P., Karrer, W., Rothschild, E., and Salomon, H., isolation of vitamin-K in purified form, III, 498.
- and Olavind, J., clotting of human and mammalian blood in relation to vitamin-K, III, 117. Alimentary exudative diathesis [and vitamin-K], III, 262.
- and Olavind, J. [with Brundsen, I.], alimentary avitaminosis-K in rats, III, 923.
- Olavind, J., Bernth, O., and Hagens, E., anti-encephalomalacia activity of di- α -tocopherol, III, 292.
- D'Ambrosio, L. See De Lucia, P., and Morelli, A.
- Dame, *Pseudomonas tumefaciens* (Burt. et Towns.), the cause of crown gall in relation to the host plant, III.
- Dameshek, W., Schwartz, H. O., and Gross, H., hemolysins as the cause of clinical and experimental hemolytic anemias, III, 228.
- Damianovitch, H., inertia and chemical activity of the rare gases; action of helium on sodium under the influence of electrical discharge at low pressures, I, 278. Helium and the rare gases; combination of helium with uranium by cathodic activation and the thermal decomposition of the, I, 278.
- Damm, G. J., and H. A., cardiac muscle in idiopathic hypertrophy of the heart in infancy and in normal growth.
- Damodaran, M., and Knappan, P. S., enzymic proteolysis. II. Production of free tyrosine during peptic digestion, III, 98.
- and Narayanan, E. K., enzymic proteolysis. III. Hydrolysis of asparagine-peptides, and anhydride-glycylasparagine, III, 198.
- Damon, E. B., bioelectric potentials in *Valonia*. II. Effects of artificial waters containing lithium, cesium, rubidium, and ammonium chlorides, III.
- D'Amour, P. E. See D'A. M. C., and Smith, D.
- D'Amour, M. C., and D'Amour, P. E., effects of on survival of adrenalectomized rats, III, 977.
- Damsardet, E. E. See Sartar, E. L.
- Danby, assay of male hormones by the chicken test, III, 142.
- Dancoff, S. H., radiative corrections for electron scattering, I, 296. Virtual state of life and neuron forces, I.
- and Morrison, P., internal conversion coefficients, I, 177.
- Dandliker, W. E., Coates, and Traub, H. P., vitamin-B₁₂ and germination of pollen, III, 361.
- Dandmann, M. R., residual chromium index in the plasma of the diabetic, III, 78.
- Dane, (F. H.) E., and Eder, K., syntheses in the hydrazinamide series. VI. Addition of 4-methoxy-1-vinyl-2-thiopyran to 2-thiopyran, III, 624.
- Dane, O., Eder, K., Schmitt, J., and Schindl, O., syntheses in the hydrazinamide series. III. Further dimer syntheses from 4-methoxy-1-acetylenyl- and 1-oxo-2-thiopyran, III, 624.
- condensation of cyclopentanones with, III, 21.

- Dane, (*Frl.*) E., and Schmitt, J., syntheses in the hydroaromatic series. IV. Condensation of 3-methyl-4³-cyclopentene-1:2-dione with 6-methoxy-1-vinyl-3:4-dihydronaphthalene; preparation and diene syntheses of 3-hydroxy-2:6-dimethyl-*p*-benzoquinone. V. Synthesis of an isomeride of oestrone, II, 27, 218.
- Danes, V. Z., viscosity of materials with flow-solidity, I, 160. Dependence of flow of benzopurpurin sols on dimensions of capillary, I, 319. Fifty-cell laboratory distillation column, I, 391.
- Danforth, C. H., physiology of human hair, III, 279. Genetic hormonal factors in biological processes, III, 889.
- Danforth, D. N., concentration and possible significance of histaminase in human placenta, III, 984.
- Danforth, J. D., and De Vries, T., densities of vapours adsorbed on charcoal, I, 315.
- Danforth, W. E. See Korff, S. A., and Swann, W. F. G.
- Dangerfield, W. G. See Boursnell, J. C.
- Dangian, M., reactions of ferric chloride. I, II, 253.
- Daniel, R., exophthalmos associated with hyperthyroidism, III, 257.
- Danielli, J. F., resistance of nerve in relation to interpolar length, III, 748. Site of resistance to diffusion through cell membrane and rôle of partition coefficients, III, 784. Protein molecule, III, 785.
- Danielli, M., and Marrack, J., surface films of antibodies and antigens. I. Effect of spreading on a water surface on the specific properties of pneumococcus (type II) antibody and horse-serum globulin, III, 331.
- Danielli, M. See Danielli, J. F.
- Danielopolu, D., surgical treatment of angina pectoris, III, 123.
- and Marcou, L., amphomimetic action of adrenaline, III, 44. Sensitisation and accommodation to adrenaline, III, 911. Effect of acetylcholine on vasoconstrictor action of adrenaline, III, 978.
- Daniels, A. L., whey as substratum in vitamin-B₁ assays, III, 1070.
- Daniels, F., and Veltman, P. L., decomposition of ethyl bromide and the collision theory of first-order reactions, I, 615.
- See also Petering, H. G.
- Daniels, G. H. See Weidlich, H. A.
- Daniels, L. P., significance of various phenomena of myxoedema, III, 578.
- Danielson, I. S., and Hastings, A. B., determination of carbon dioxide in tissue, III, 1113.
- Danielson, W. H., Stecher, R. M., Muntwyler, E., and Myers, V. C., acid-base balance of serum in hyperthermia, III, 452.
- Danieson, R. N., light intensity and melanophore response in a cyprinid fish, III, 319.
- Danis, P. G., narcolepsy [treated by ephedrine], III, 970.
- Dankov, P. D., theory of passivity and corrosion of metals, I, 374.
- and Schischakov, N. A., oxide films on metals. I, I, 367.
- Dankova, T. F. See Berkenheim, A. M.
- Dann, M. See Cowgill, G. R.
- Dann, W. J. See Kohn, H. I., and Subbarow, Y.
- Dannenbergh, H. See Butenandt, A.
- Danopoulos, E., effect of various types of starch in a mixed diet on the glycogen content of the liver, III, 80.
- D'Ans, J. See Tollert, H.
- Dansi, A., and Ferri, C., substitution reactions of 1:2-benzanthracene, II, 362.
- and Vercellone, A., biochemical reduction of a 1:2-benzanthracene derivative, II, 420.
- Dantchakoff, V., effect of testosterone treatment in embryo on sexual development, III, 53. Chemical influence on development of sexual characters in the reptilian embryo, III, 224. Folliculin in sexual histogenesis of mammalian embryos, III, 382. Paradoxical gonadotropic properties of testosterone, III, 384. Effect of gonadotropic hormones and oestrone on lizard embryo, III, 584. Hypophysis syndrome in young female guinea-pigs after testosterone, and fate of unripe ova, III, 687. Fate of gametes in guinea-pig treated with hormones during embryonic life, III, 757. Fate of gametes in fowl treated with hormones during embryonic life, III, 757.
- Dantes, D. A. See Softer, L. J.
- Dantuma, R. S., determination of rate of evaporation of liquids, I, 539.
- Dantzig, D. van, relativistic gas theory, I, 604. Relativistic thermodynamics, I, 604.
- Danziger, L., sulphanilamide; delayed toxic reaction, III, 303.
- Dapples, E. C., coal metamorphism in the anthracite-crested Butte quadrangles, Colorado, I, 588.
- Darbaker, L. K. See Shuey, P. F.
- Darby, W. J., and Day, P. L., riboflavin content of meats, III, 74.
- See also Langston, W. C.
- Dardinski, V. J., and Lyddane, E. S., agranulocytic angina [from amidopyrine], III, 549.
- Darling, B. T., Curtis, B. R., and Cork, J. M., radioactivity in iron by deuteron bombardment, I, 5.
- Darling, M. A., Berris, T. M., and Newman, M., artificial fever therapy in pelvic inflammatory disease, III, 418.
- Darmois, E., Doucet, Y., and Murgier, (Mlle.) M., cryoscopy of molybdic acid in aqueous solution, I, 262.
- and Theodoresco, (Mlle.) M., Raman spectrum of neutral molybdates in the crystalline state and in aqueous solution, I, 355.
- See also Murgier, (Mlle.) M.
- Darmon, (Mlle.) M. See Dupont, G.
- Daroga, R. P. See Lakhani, J. V., and Sutherland, G. L.
- Darrow, C. W., and Gellhorn, E., inhibitory effects of adrenaline on autonomic function, III, 978.
- See also Gellhorn, E.
- Darrow, D. C., importance of deficit of sodium and chloride in dehydration, III, 355.
- Darsie, M. L., jun. See Blinks, L. R.
- Dartington Hall, Laboratory Staff, permanent covering for necks of hot-water wash bottles, I, 161. Electric micro-Kjeldahl heating stand, I, 224.
- Dartnall, H. J. A., a visual phenomenon, III, 133.
- Darzins, G., halogenomethylation of aromatic compounds in acetic acid, II, 211. Action of aqueous ammonia on halogenoderivatives; preparation of aliphatic diamines, II, 301.
- Darzins, E., action of pine and chaulmoogra oils on acid-fast bacilli and on experimental tuberculosis in the guinea-pig, III, 336.
- Das, G. C. See Ray, N. N.
- Das, N. N. See Chopra, R. N.
- Das, S. R., and Ghosh, K., study of the allotropes of sulphur by the X-ray diffraction method. II., I, 460.
- and Gupta, K. D., conversion of vitreous and monoclinic (α) selenium into the hexagonal modification, I, 243. X-Ray diffraction by supercooled liquid sulphur, I, 243.
- Das Gupta, C. R., action of leucopoietic drugs, III, 812.
- Das-Gupta, D. See Ghosh, T. N.
- Das-Gupta, H. K. See Dube, G. P.
- Das-Dupta, H. N., organo-arsenic compounds. VIII. Synthesis of arsinole derivatives from phenylacetylene. IX. Synthesis of succinylphenylarsine, II, 94.
- Das-Gupta, P. K. See Basu, U. P.
- Das-Gupta, S. J., acridine derivatives as antimalarials. IV., II, 562.
- See also Basu, U. P.
- Dasannacharya, B., and Seth, A. C., Geiger point counters, I, 222.
- Daschevski, M. M., and Karischin, A. P., halogen derivatives of acenaphthene, II, 539.
- Daschkevitch, B. N., preparation of R-methyl ketones from keten. I. Preparation of acetophenone, II, 68.
- Dascola, G., atom [form] factors from some heavy ions, I, 456.
- See also Valle, G.
- Dash, H. H. See Stekol, J. A.
- Da Silva, A. M., materialisation of energy, I, 400.
- See also Curie, (Mme.) I.
- Da Silva, D. J., water-soluble vitamins, III, 164.
- Da Silveira, A., Raman effect of concentrated electrolytic solutions, I, 355.
- Dass, (Miss) I. N. D. See Dutt, S.
- Dastur, R. H., Kanikar, U. K., and Rao, M. S., formation of proteins in leaves in light of different quality, III, 340.
- Datar, D. S., Athavale, V. T., and Jatkars, S. K. K., reactions of chromates at high temperatures. VIII. 25% stage in the decomposition of calcium, strontium, and barium chromates, I, 333.
- and Jatkars, S. K. K., reactions of chromates at high temperatures. IX. Thermal decomposition of chromium trioxide, I, 382.
- Dater, A. See Lehman, R. A.
- Datta, N. C. See Banerjee, B. N.
- Datta, S. C., Day, J. N. E., and Ingold, C. K., mechanism of hydrolysis of carboxylic esters and of esterification of carboxylic acids; acid hydrolysis of an ester with heavy oxygen as isotopic indicator, II, 297.
- Datzeff, M., potential barriers and the solution of the Schrödinger equation, I, 117.
- Daubard. See Rossi, P.
- Daubert, B. F., and King, C. G., relative stability of aromatic and aliphatic monoglycerides, II, 47.
- Daubner, W., separation of manganese from aluminium and iron salts and the volumetric determination of these metals, I, 387.
- Daudin, J. See Auger, P.

- Daum, K., Boyd, K., and Paul, W. D., influence of fever therapy on blood levels and urinary excretion of ascorbic acid, III, 852.
- D'Aunoy, R., and Haam, E. von, venereal lymphogranuloma, III, 794.
- Daunt, J. G., threshold and equilibrium curves for superconductors, I, 408.
- Horseman, A., and Mendelssohn, K., thermodynamical properties of superconductors, I, 409.
- and Mendelssohn, K., transfer effect in liquid He II. I. The transfer phenomena. II. Properties of the transfer film, I, 362. Surface transport in liquid helium II, I, 410.
- Dauphinee, J. A. See Graham, D.
- Daur, T. See Wedemeyer, J. E.
- Daure, P. See Cabannes, J.
- Dautrebande, L., Philippot, E., and Charlier, R., pharmacological action of β -amino- α -phenylpropane, III, 308. Action of benzedrine, III, 929.
- Philippot, E., Nogarède, F., and Charlier, R., diuretic action of small doses of ephedrine and carbon dioxide in toxic anuria, III, 1003.
- Dauvergne, M. See Mouriquand, G.
- Dauvillier, A., identification of Hoffmann collisions with electron showers produced by cosmic rays, I, 117.
- and Vassy, E., photo-counters in the ultra-violet, I, 538.
- See also Desguin, E.
- Davar, D. J., determination of dipole moments in solution, I, 598.
- Dave, K. P., and Nargund, K. S., hydroxy- and methoxy-phenylsuccinic acids, II, 265. Condensation of maleic anhydride with phenol ethers, II, 267.
- Davenport, H. A., McArthur, J., and Bruesch, S. R., staining paraffin sections with protargol. III. Optimum pH for reduction. IV. Two-hour staining method, III, 545.
- and Kline, C. L., staining paraffin sections with protargol. I. Experiments with Bodian's method. II. Use of n -propyl and n -butyl alcohol in Hoffer's fixative, III, 1.
- Davenport, H. W., and Fisher, R. B., carbonic anhydrase in gastro-intestinal mucosa, III, 147.
- Davenport, L. F., morphine, codeine, and their derivatives. XIII. Comparative effects of dihydroisocodeine and codeine, III, 86.
- Daversa, J. J. See Hirsheimer, A.
- Davey, W. See Hodgson, H. H.
- Davey, W. P., and Pfister, R. J., combined still and diffusion pump, I, 105.
- David, C., vitamin-A and thyroxine antagonism, III, 285.
- David, J. See Spillmann, L.
- David, K., seasonal changes in the sensitivity of the capon's comb, III, 142.
- David, Robert, blood groups in Madagascar, III, 7.
- See also Regnier, J.
- David, Roger, effect of enzymes on germination of *Pisum sativum*, III, 213.
- See also Grigoraki, L.
- David, V. C. See Knight, A. A.
- Davidoff, E., and Reifenstein, E., results of eighteen months of benzedrine sulphate therapy in psychiatry, III, 671.
- Davidov, B., rectification of the current at the boundary between two semi-conductors, I, 126. Theory of solid rectifiers, I, 126.
- Davidov, B., distribution of electron velocities in gas discharge tubes, I, 228. Theory of rectification in semi-conductors, I, 404.
- See also Blochintzev, D.
- Davidova, O. T. See Andreassov, L. M.
- Davidsohn, F. See Fischer, Albert.
- Davidsohn, I., recognition of blood subgroups A, and A., III, 551.
- Davidson, A. W., and Chappell, W., system zinc acetate-hydrogen chloride-acetic acid, I, 524.
- See also Lanning, W. C.
- Davidson, C. F., hyperglycaemia without glycosuria, III, 554.
- Davidson, D., extension of Knorr's pyrrole synthesis, II, 85.
- and Soloway, H., formation of uramil from dialuric acid, II, 88.
- Davidson, J. N., and Garry, R. C., absorption of monosaccharides from rat's colon under urethane anaesthesia, III, 843.
- Davidson, N. R., and Sutton, L. E., electric polarisation of flexible molecules, I, 182.
- See also Coop, I. E.
- Davidson, O. W. See Blake, M. A.
- Davidson, R. W., Campbell, W. A., and Blaisdell, D. J., differentiation of wood-decaying fungi by reactions on gallic or tannic acid media, III, 426.
- Davies, A. W., and Moore, T., determination of vitamin-A and carotene in organs, III, 993. Vitamin-A content of cheese, III, 1068.
- Davies, C. B. See Gee, G.
- Davies, C. W., analytical notes. I., I, 37. Extent of dissociation of salts in water. VIII. Equation for the mean ionic activity coefficient of an electrolyte in water, and a revision of the dissociation constants of sulphates, I, 79. Second dissociation constant of barium hydroxide, I, 263.
- See also Money, R. W.
- Davies, D. A. B., manganese and gold deposits in the lower and middle Barama River of North-West District, British Guiana, I, 437.
- Davies, D. T., and Wilson, A. T. M., emotional factors in hamatemesis and perforation, III, 1057.
- Davies, J. M. See Cooper, K. E.
- Davies, L. J., practical applications of luminescent solids, I, 124.
- Davies, M. M., infra-red study of ω -hydroxyundecic acid in carbon tetrachloride, I, 60. Infra-red study of hydrazoic acid, HN₃, I, 550.
- and Sutherland, G. B. B. M., infra-red absorption of carboxylic acids in solution. I. Qualitative features. II. Intensities, I, 59.
- Davies, R. M. See Jones, T. T.
- Davies, R. R. See Hodgson, H. H.
- Davies, S. See Cohen, H.
- Davies, W., vitamin-A and -D content of mutton bird oil, III, 702.
- Holmes, B. M., and Kefford, J. F., ω -bromo- α -cyanostyrenes and related compounds, II, 214.
- Kefford, J. F., and Osborne, J. L., synthesis of 1-isouquinoline derivatives, II, 227.
- Davies, W. C., reactivities and basic strengths of p -alkyldimethylanilines, I, 25.
- and Evans, D. P., depolarisation potentials of phenyl alkyl ketones in acid, neutral, and basic media at the dropping mercury cathode, I, 325.
- Davies, W. C., Evans, (Miss) E. B., and Hulbert, F. L., formation of quaternary ammonium salts from dihalogeno-paraffins, etc., in aqueous acetone solution, II, 203.
- Evans, (Miss) E. B., and Whitehead, H. R., reactions of tertiary bases with polyhalogeno-paraffins, II, 238.
- Davies, W. L., composition of crop milk of pigeons, III, 913.
- Davis, B. D., and Cohn, E. J., influence of ionic strength and pH on electrophoretic mobility, I, 522.
- Davis, D. N., wave-lengths in the spectrum of Antares, I, 229.
- Davis, D. S., thermal conductivity of liquids, I, 463.
- Davis, E., temporary hemiplegia following symptomatic convulsions, III, 571. Dermatitis and stomatitis from M. & B. 693, III, 774.
- Davis, G. E., relapsing fever: guinea-pig as an experimental animal, III, 1103.
- Davis, George E., devices for visual comparison of spectrograms, I, 433.
- Davis, G. R. See Morgan, (Sir) G. T.
- Davis, H., Davis, P. A., Harvey, E. N., and Hobart, G., search for changes in direct-current potentials of the head during sleep, III, 670.
- Davis, H. A., and Blalock, J. F., jun., autologous and homologous transfusion of human ascitic fluid, III, 448.
- and Jermstad, R. J., regional distribution of blood in experimental shock, III, 561.
- and Tullis, I. F., jun., effect of experimental production of accessory blood supply on normal kidney, III, 915.
- Davis, H. H., severe reactions following transfusion in haemolytic jaundice, III, 7.
- and Whiston, G., morphine as a factor in post-operative vomiting, III, 412.
- Davis, H. J., Norris, L. C., and Heuser, G. F., rôle of vitamin-B₂ in reproduction in poultry, III, 602. Amount of vitamin-B₂ required for reproduction in poultry, III, 602.
- Davis, H. L., and Hay, K. D., silica gels from various acids; effect of concentration and mixtures on setting time, I, 369.
- Davis, H. P., and Willett, E. L., relation between rate of growth and milk and fat production, III, 156.
- See also Hathaway, I. L., and Reece, R. P.
- Davis, J. E., depression of polycythaemia by choline hydrochloride, III, 958.
- Davis, J. G., nutritional requirements of lactic acid bacteria, III, 943. Pasteur reaction in lactic acid bacteria, III, 1099.
- Rogers, H. J., and Thiel, C. C., production of diacetyl by faecal streptococci, III, 727.
- Davis, J. J., jun. See Friedman, H. B.
- Davis, J. Z. See Latta, J. S.
- Davis, L., jun., wave functions of the relativistic hydrogenic atom, I, 506.
- Davis, L. D., and Moore, N. P., black-end of pears. V. Seasonal changes in pH of the fruit, III, 802.
- Davis, M. E., and Koff, A. K., experimental production of ovulation in the human patient, III, 382.
- Davis, P. A. See Davis, H.
- Davis, T. W., and Ricci, J. E., solubility of strontium chromate, I, 253.

- Davis, V. E. See Lewis, D. T.
 Davis, W. B. See Coates, G. M.
 Davis, W. L. See Johnson, R. P.
 Davis, W. W. See Clowes, G. H. A.
 Davison, C., and Brill, N. Q., chronic hypertensive encephalopathy, III, 659.
 Davison, E. H., leaching of granite and some other rocks, I, 48.
 Davison, H. G. See Morgan, A. F.
 Davison, R. See Lundy, C. J.
 Davoud, J. G., and Hinshelwood, C. N., thermal decomposition of diethyl ether, I, 375.
 Davson, H., permeability of erythrocytes. VI. Effect of reducing the salt content of the medium surrounding the cell, III, 449. Permeability of cat erythrocytes to sodium and potassium, III, 547. Distribution of sodium between cat's aqueous humour and blood plasma, III, 903.
 Dawhl, W., and Rix, W., increase in strength of quartz glass through rise of temperature, I, 459.
 Dawson, A. See Bowie, F. J. T.
 Dawson, A. B., epithelial components of the pituitary gland of the opossum, III, 444.
 Dawson, C. R., and Holmes, E., metabolism of lactic acid in diphtheritic toxæmia, III, 1078.
 Dawson, D. J. See Rook, A. F.
 Dawson, E. C. See Clefmo, G. R.
 Dawson, James R., infection of chicks and chick embryos with rabies, III, 728.
 Dawson, M. H. See Hench, P. S., and Meyer, K.
 Dawson, P. R. See Schricker, J. A.
 Dawson, R. F., and Robson, J. M., actions of diethylstilbestrol and other substances, III, 588. Effects of diethylstilbestrol on striped muscle, III, 982.
 Day, A. L., hot-spring problem, I, 628.
 Day, A. R., and Kelly, C. F., *N*-menthyl-substituted amides, II, 390.
 See also Bloom, A.
 Day, C. D. M. See Taylor, G. F.
 Day, F. H., halogenation in the anthraquinone series, II, 328.
 Day, F. T., oestrous cycle of mare following removal of the foetus at various stages of pregnancy, III, 1052. Ovulation and descent of ovum in Fallopian tube of mare after treatment with gonadotropic hormones, III, 1054.
 Day, H. G., Becker, J. E., and McCollum, E. V., effect of ether peroxides in wheat-germ oil on production of tumours in rats, III, 846.
 and McCollum, E. V., mineral metabolism, growth, and symptomatology of rats on a diet extremely deficient in phosphorus, III, 1066.
 and Orent-Keiles, E., adequacy of cow milk as source of magnesium for rats, III, 1067.
 and Stein, H. J., effect on hæmatopoiesis of variations in dietary levels of calcium, phosphorus, iron, and vitamin-D, III, 398.
 Day, J. N. E., and Sheel, P., oxygen isotopic exchange in animal respiration, III, 295.
 See also Datta, S. C.
 Day, M. F., gaseous environment of *Eutermes exitiosus*, Hill (Isoptera), III, 405.
 Day, P. L. See Darby, W. J., Langston, W. C., and Shukers, C. F.
 Day, R., blood pressure determination in children, III, 562.
 and Klingman, W. O., effect of sleep on skin temperature reactions in a case of acrocyanosis, III, 660.
 Day, R. A., jun., and Pease, R. N., determination of water in organic liquid mixtures, II, 194.
 Dayman, A. L. See Neter, E.
 Dazeley, G. H. See Mills, W. H.
 De, H. N. See Basu, K. P.
 De, L. K. See Mitter, P. C.
 De, M. N., and Dutta, H. K., foetus with one eye (*Cyclops*), III, 673.
 De, N. See Chopra, R. N.
 De, N. K., and Majumdar, B. N., assimilation of carotene by rats from a "poor Madrassi diet": influence of skimmed milk and calcium lactate, III, 284.
 Majumdar, B. N., and Sundararajan, A. R., vitamin-A activity of fish oils and vegetable foods. I. and II., III, 285.
 De, P. K., rôle of blue-green algae in nitrogen fixation in rice-fields, III, 792.
 See also Fritsch, F. E.
 De, S. See Mitter, P. C.
 De, S. P., and Basu, U. P., chemotherapeutic study of streptococcal infections, III, 305.
 De, S. S. See Ghosh, B. N.
 De, U. N. See Bose, J. P.
 Deaglio, R., thin metal membranes, I, 374.
 Deakins, M., effects of caffeine on human sugar-tolerance curves, III, 1077.
 De Allende, I. L. C., action of the pituitary on the oviduct of batracians, III, 576. Sexual cycle in the female toad, *Bufo arenarum*, III, 683.
 De Almeida, A. G., experimental basis of determination of hydrogen ions by colour analysis, I, 213. Colour analysis, I, 221.
 De Almeida, M. O., effect of environmental temperature on epileptiform fits produced by sudden chilling of spine in *Leptodactylus ocellatus*, III, 971.
 Deamer, W. C., allergic diseases in childhood, III, 93.
 De Amicis, D. See Stolfi, G.
 Dean, H. T., and McKay, F. S., production of mottled enamel halted by a change in the common water supply, III, 783.
 Dean, R. B., potentials at oil-water interfaces, I, 467. Potentials and effective ionic mobilities in frog skin, III, 109.
 Gatty, O., and Stenhagen, E., deposition of protein multilayers, I, 415.
 Dean, S. R., convulsant therapy. II. Role of alkalisation, III, 130.
 Deanesly, R., androgenic activity of ovarian grafts in castrated male rats, III, 55. Depression of hypophyseal activity by implantation of tablets of oestrone and oestradiol, III, 1052.
 Deans, S. A. V. See Stevens, P. G.
 Deans, T., igneous rocks from the Abercorn and Kasama districts, N. Rhodesia, I, 164.
 Dear, P. S., adapting miniature cameras to petrographic photomicrography, I, 579.
 Dear, R. B. See Alpers, B. J.
 De Araujo Feio, P. L., modified Schrotter apparatus, I, 493.
 Dearborn, W. F., and Rothney, J. W. M., relation between body-weight and linear bodily dimensions, III, 345.
 De Arruda, J., pathology of epithelia in vitamin-A deficiency, III, 850.
 Deasy, (Miss) C. L. See Oesper, R. E.
 Deatherage, F. E., and Olcott, H. S., synthesis of cis- Δ^1 -octadecene, Δ^1 -octadecene, and octadecane- α -diol, II, 197.
 Deb, S., microscopic characters of some manganese minerals found in the lateritic manganese ore of Belgaum District, S.W. India, I, 497.
 Deb, S. C. See Dutta, A. K.
 Debaisieux, P., sensory organs in head of *Lucilia sericata*, III, 664.
 De Bakey, M. See Ochsner, A.
 De Balzac, R. H. See Laubry, C.
 De Barenne, J. G. D., laminar thermocoagulation of the cerebral cortex, III, 129.
 and McCulloch, W. S., interpretation of the electrocorticogram, III, 34. Factors for facilitation and extinction in the central nervous system, III, 1036.
 Marshall, C. S., McCulloch, W. S., and Nims, L. F., p_H of arterial blood, p_H and electrical activity of the cerebral cortex, III, 372.
 Debauche, H., silver impregnation for nerve cells, III, 545.
 De Beco, P., verification of the Faraday laws at the positive pole in electrolysis by spark, I, 271.
 De Beer, E. J., and Hjort, A. M., basal metabolism [B.M.R.], body temperature, pulse rate, and respiratory rate of a group of pure-bred dogs, III, 293.
 Hjort, A. M., and Cook, C. A., analysis of seasonal influences on duration of anaesthesia in albino mice, III, 313. Analysis of seasonal influences on response of albino mice to anaesthetics, III, 313.
 Hjort, A. M., and Fassett, D. W., analysis of relationships between environmental changes and duration of anaesthesia in albino mice, III, 863.
 See also Hjort, A. M.
 Debenham, E. M., staining herbarium material of species of *Selaginella*, III, 804. Microscopic examination of xylem of whole plants or plant organs, III, 804.
 Deberque, S. See Berthelot, A.
 De Berredo Carneiro, P., active principles of curare, II, 233. Curarisation and chronaxie, III, 548, 900. Strychnol-ethaline, curare, and curarisation, III, 866.
 Debeyre, A., and Gineste, P. J., anatomico-physiological classification of goitres, III, 908.
 Debeyre, J. See Worms, G.
 Debiessé, J., absorption spectra and chemical constitution of Santon's liquid inoculated with B.C.G. tubercular bacilli, III, 420.
 Debler, K., action of liver extract in ascending paralysis, III, 33.
 De Boer, J., and Michels, A., quantum-mechanical theory of the equation of state and the law of corresponding states; determination of the law of force of helium, I, 68. Influence of interaction of more than two molecules on molecular distribution-function in compressed gases, I, 248. Quantum-mechanical calculation of the second virial coefficient of helium at low temperatures, I, 363.
 See also Michels, A.

- De Boer, *J. H.*, entropy and energy in solutions or mixtures, I, 82.
and Fast, *J. D.*, diffusion of hydrogen through iron at room temperature, I, 607.
Hamaker, *H. C.*, and Verwey, *E. J. W.*, electrodeposition of a thin layer of powdered substances, I, 479.
See also Bruining, *H.*
- De Boer, *S.*, action of quinidine and hydroquinidine on auricular fibrillation, III, 506. Nature of fibrillation, III, 745.
See also Berg, *L. M. van den.*
- De Boissezon, *J.* See Argand, *R.*
De Boissezon, *P.* See Pierre, *M.*
- Debono, *J. E.*, prontosil in *Brucella melitensis* infection, III, 502.
- De Booy, *J.* See Hermans, *P. H.*
- De Borchgrave, *O.* See Bessemans, *A.*
- De Braaf, *W.* See Ornstein, *L. S.*
- Debray, *C.* See Benda, *R.*, and Chiray, *M.*
- De Broglie, *L.*, theory of particles of any spin, I, 506.
- De Brouckère, *L.*, adsorbent properties of barium sulphate. II., I, 73.
- De Brouwer, *S.*, titrations with a tellurium electrode, I, 432.
- De Bruin, *J. A.* See Boeseken, *J.*
- De Bruin, *M.*, basal metabolic rate in children with abnormal bodily dimensions, III, 1076.
- De Bruin, *T. L.*, and Lier, *J. N.*, absorption spectrum of thorium, I, 1.
See also Kiess, *C. C.*
- De Bruyn, *P.*, influence of phenols in the Sudan coloration of leucocytes, III, 3.
See also Iiterbeek, *A. van.*
- De Bruyn, *W. M.*, comparative study of two transplantable round-cell sarcomas of mice by the tissue culture method, III, 763.
- De Burlet, *H. M.*, a *Triton* labyrinth with only one semicircular canal, III, 38.
- De Busmann, *M.*, and Leinbrock, *A.*, organ analysis in lipid nephrosis of children, III, 760.
- De Busscher, *J.* See Bogaert, *L. van.*
- Debye, *P.*, photographing electron interference at single molecules, I, 130, 394, 538. Quasi-crystalline structure of liquids, I, 183.
and Pirene, *M. H.*, Fourier analysis of interferometric measurements of free molecules, I, 64.
and Ramm, *W.*, dispersion and absorption by polar substances, I, 10.
- De Calseyde, *P. van.*, liver therapy and cholesterolemia. II., III, 65.
- De Camp, *P. T.* See Coman, *D. R.*
- De Caro, *L.*, absorption from the alimentary canal; carbohydrates and fats, III, 64. Copper content of tissues and protection by vitamin-C, III, 75.
and Cantoni, *G.*, antistreptococcal action of a new derivative of sulphanilamide, III, 178.
and Roviada, *E.*, intestinal absorption of glucose and xylose during avitaminosis-C, III, 76.
See also Cantoni, *G.*
- Decastello, *A.*, research on leukaemia, III, 1027.
- Dechene, *G.*, photo-electric cell, I, 221.
and Reboul, *A.*, action currents and theories of excitability of nerve fibre, III, 968.
- Decherd, *G. M.*, and Dickens, *K. L.*, presumptive tests for Bence-Jones protein, III, 320.
See also Herrmann, *G.*
- Decherd, *L.* See Williams, *Dudley.*
- De Chézelles, *N.*, and Grégoire, *J.*, anaerobic action of *B. coli* on the yellow enzyme in presence of nitrate, III, 1008.
- Dechtjar, *M.*, influence of elastic stresses on the initial susceptibility of monocrystals, I, 309.
- Decker, *C. T.*, action of citrin [on blood], III, 450.
- Deckner, *K.*, cytological studies of carcinoma cells, III, 157.
- Deco, *M.*, effect of cooking and reheating on vitamin-A and carotene contents of milk, III, 765. Seasonal variations in vitamin-A and carotene contents of fresh milk, III, 765.
- Décombe, *J.*, diethyl 3:5-diacyltetrahydropyran-3:5-dicarboxylate and diethyl 3-methyl-4-hydroxymethyl- Δ^2 -cyclohexenone-4:6-dicarboxylate, II, 384.
- DeCosta, *E. J.*, the photostethoscope, III, 235.
- Decourt, *J.*, and Guillaumin, *C. O.*, sodium, potassium, and chloride content of the blood in Addison's disease, III, 1051.
Guillaumin, *C. O.*, and Bernard, *J.*, water content of blood cells and plasma during treatment of diabetes insipidus with pituitrin, III, 1048.
- De Croat, *A. F.* See McDonald, *C. H.*
- Decroly, *C.*, is the Le Chatelier-Matignon equation applicable to the reduction of ferrous oxide and of phosphoric anhydride? I, 266.
- De Cugnac, *A.*, and Belval, *H.*, nature of the carbohydrate stored by a hybrid of two Gramineæ with different carbohydrate reserves, III, 533.
- De Giorgi, (*Mme.*) *A. C.*, and Zappi, *E. V.*, new aromatic fluoro-derivatives, II, 54.
- De Demo, *M.* See Cornubert, *R.*
- Dederding, *D.* See Mygind, *S. H.*
- De Donder, *T.*, rôle of affinity in statistical mechanics, I, 358.
and Géhéniau, *J.*, internal tension and dynamics of the radiating electron, I, 2.
- Dedusenko, *L. S.*, synthesis of α -amino-alcohols from pyrolysis products of gas oil and identification of hydrocarbons in them, II, 534.
- Dee, *P. I.*, Curran, *S. C.*, and Strothers, *J. E.*, emission of γ -rays from fluorine under proton bombardment, I, 397.
See also Curran, *S. C.*
- De Eds, *F.*, fluorine in relation to bone and tooth development, III, 399.
Eddy, *C. W.*, and Thomas, *J. O.*, phenothiazine. V. Fate of phenothiazine in the body, III, 83.
Stockton, *A. B.*, and Thomas, *J. O.*, phenothiazine. VIII. Antiseptic value of phenothiazine in urinary tract infections, III, 711.
See also McNaught, *J. B.*, and Thomas, *J. O.*
- Deem, *A. W.*, Thorp, *F., jun.*, and Durrell, *L. W.*, range plant newly found to be poisonous, III, 779.
See also Thorp, *F., jun.*
- Deer, *W. A.*, and Wager, *L. R.*, olivines from the Skaergaard intrusion, Kangerdlugssuak, East Greenland, I, 286.
- De Espanès, *E. M.*, effect of gelsemine on the nervous system of poikilothermic animals, III, 417. Effect of fagarine I on isolated eye of toad, III, 777.
and Martinez, *C. A.*, effect of acetylcholine on the perfused heart, III, 657.
- Deevey, *E. S., jun.* See Hutchinson, *G. E.*
- De Fazi, *R.*, and Pirrone, *F.*, indones. XVI. Partial dehalogenation of the two 2:3-dichloro-3-phenyl-2-ethylhydrindones, II, 377.
- Defet, *L.*, piezometric researches. IV. Influence of high pressures on the fusion curve of binary mixtures, I, 27.
- De Fiquelmont, *A. M.*, phosphonitrile chlorides and their derivatives, I, 575.
Magat, *M.*, and Ochs, (*Mlle.*) *L.*, Raman spectrum of the trimeric phosphonitrile chloride molecule, $(\text{PNCl})_3$, I, 450.
See also Moureu, *H.*
- De Fonbrune, *P.* See Kling, *A.*
- De Fremery, *P.*, effect of gonadotropic extracts on female monkeys, III, 1045.
- Defries, *R. D.*, Ross, *M. A.*, and Sellers, *A. H.*, study of 456 deaths in Ontario attributed to diabetes, III, 1078.
- Degan, *C.*, effect of pituitary extracts on nerve excitability, III, 244.
See also Gradinesco, *A.*
- De Gaouck, *V.*, and Le Fèvre, *R. J. W.*, geometrical isomerism in anils, and dipole moment of phenanthridine, I, 598. Phototropy of anils and of solutions of the leuco-cyanides of malachite and brilliant greens, II, 506.
- De Gara, *P. F.* See Bukantz, *S. C.*
- Degard, *C.*, method of radial distribution applied to interpretation of diffraction of electrons by the molecules of gases, I, 186.
- De Garis, *C. F.* See Chase, *R. E.*
- De Gennaro, *I.*, vesicular epithelia of human fetus, III, 1023.
- Degens, *P. H., jun.*, incomplete combustion of methane, I, 203.
- Degering, *E. F.* See Binkley, *W. W.*, Bittenbender, *W. A.*, Bowen, *C. V.*, and Goshorn, *R. H.*
- Deglade, *L.*, and Laubry, *P.*, oesophageal electrocardiograms, III, 559.
- Degman, *E. S.* See Batjer, *L. P.*
- DeGowin, *E. L.*, Harris, *J. E.*, and Plass, *E. D.*, changes in human blood preserved for transfusion, III, 815.
- De Graff, *A. C.*, Batterman, *R. C.*, Lehman, *R. A.*, and Yasuna, *E.*, excretion of mercury following administration of mercurial diuretics with and without theophylline, III, 414.
Cowett, *M.*, and Batterman, *R. C.*, rectal irritation after mercurial diuretic suppositories, III, 1089.
- De Gramont, *A.*, colour perception. I. and II., III, 376.
- De Groot, *S. R.* See Biedermann, *M. M.*
- De Groot, *W.*, luminescence decay and related phenomena, I, 241. Saturation effects in short-duration photo-luminescence of zinc sulphide phosphors, I, 355.
- De Haan, *J.*, perfusion method for tissue culture in its latest form, III, 220.
- De Haas, *W. J.*, and Du Pré, *F. K.*, spin-lattice equilibrium in cassium titanium alum at low temperatures, I, 66. Paramagnetic relaxation in gadolinium sulphate, I, 514.
and Schultz, *B. H.*, anomalies in the magnetism of several anhydrous salts of the iron group, I, 188.

- De Haas, W. J., and Schultz, B. H., magnetic properties of salts of the iron group at low temperatures, I, 408.
See also Casimir, H. B. G.
- De Hemptinne, M., and Capron, P., concentration of carbon (^{13}C) by diffusion, I, 381.
and Manneback, C., Raman effect and the potential function of the ethylene molecule, I, 300.
and Velghe, C., Raman spectra of deuterethyl and deuterethylene bromides, I, 58.
See also Capron, P., Rajam, J. B. R., and Savard, J.
- Dehlinger, U., course of melting curves in the equilibrium diagram of bronzes, I, 250.
See also Sommermeyer, K.
- Dehmel, H., determination of low tetanus toxin antitoxin values in small quantities of serum, III, 434.
- Dehn, W. M. See Pearl, I. A., and Quense, J. A.
- Dehorne, A., secretory forms of the modified chondriome, III, 2. Modification of chondriome suggesting participation in secretion, III, 957.
- Deichmann-Gruebner, W., toxicological studies of *N*-isobutylamides of aliphatic acids, III, 511.
See also Kehoe, R. A.
- Denel, H. See Fricke, R.
- Deighton, T., metabolism of fowls. I. Calorimeter for direct determination, III, 996.
- Deijs, W. B., catechins from tea-leaves, III, 951.
- Deinse, F. van, comparative study of xanthoproteic reaction and the presence of tuberculin in cultures of human and bovine *B. tuberculosis* on Sauton's medium, III, 945.
and Hooghiemster, E., acid-alcohol resistance of paratubercular bacilli, III, 104.
and Solomides, J., increase in basophil polynuclears in experimental tuberculosis, III, 448.
- Deist, H., sedimentation rate after exercise, III, 8.
- Deitrick, J. E. See Stewart, H. J.
- Dejardin, G., luminous discharge in nitrogen in presence of sodium chloride, I, 165. Red bands of cyanogen in spectrum of the night sky, I, 229.
See also Arnulf, A.
- Dejean, C., and Ferrié J., persistent pupillary membrane, III, 1040.
- De Jong, A. W. K., absence of *l*-benzoyl-ecgonine and presence of an ester, probably the methyl ester of *l*-ecgonine, in Java coca leaves, III, 439.
- De Jong, H., catatonic symptoms after Eck's fistula, III, 485.
- De Jong, H. G. B., specific effects of cations in flocculation and discharge of negative biocolloids, I, 24.
and Bank, O., behaviour of microscopic bodies consisting of biocolloid systems and suspended in an aqueous medium. III. Coacervation phenomena in droplets or biocolloid sols enclosed in a colloidal film; accumulation of basic dyes. IV. Vacuolation of complex coacervate drops at constant temperature; formation of foam structures and of thin-walled drops with large central vacuole. V. Gelatinised hollow spheres; temporary invagination to gastrula-like bodies by mechanical or osmotic removal of water from central cavity, I, 142, 260.
- De Jong, H. G. B., Saubert, G. G. P., and Booy, H. L., influence of organic non-electrolytes on oleate and phosphatide coacervates. III. Influence of temperature on oleate coacervates and details of the "volume" method; action of alcohols on oleate coacervates under different conditions of temperature and potassium chloride concentration, I, 198.
and Wakkie, J. G., colloid models for the illustration of biological processes. V. Electrophoresis curves of special type in yeast cells and their dependence on electrophoretic behaviour of cell-wall materials, III, 320.
and Westerkamp, R. F., colloid models for the illustration of biological processes. IV. Concentration effect of coacervate systems, III, 320.
- De Jong, H. H., determination of sulphapyridine, III, 1083.
- De Jong, W. F., and Bouman, J., reciprocal and Bravais lattice of gypsum, I, 306.
- De Jonge-Cohen, T. E., molarisation of upper premolars in man, III, 442. Unusual eruption of third molar, III, 442. Anomalies of teeth. V, III, 738. Radix premolarica unilateralis, III, 955.
- De Jongh, S. E. See Sindram, I. S., and Woerd, L. A. van der.
- De Kerleau, J. C., and Cayla, J., blood-phosphatase in pregnancy, III, 556.
- Dekker, W. A. L., physicochemical characterisation of proteins and protein complexes, I, 258.
- Dekkers, H. J. N., fate of transfused red blood cells, III, 814.
- Dekking, (Mlle.) A. C. B. See Jorissen, W. P.
- De Klerk, D. See Casimir, H. B. G.
- De Kock, P. C., and Rapson, W. S., correlation between the chemical constituents and morphological structure of *Thesium* species, III, 342. Volatile oil glycosides of *Thesium virgatum*, III, 884.
- De la Bernardie, A. M., antagonism between thyroxine and vitamins, III, 600.
- De Labriola, E. R. See Deulofeu, V.
- Delachaux, A., and Schneider, G., treatment of arterial hypertension with short-wave irradiation of carotid sinus, III, 745.
- De Lafuente, E. See Del Fresno, C.
- Delage, B., lipin-protein system of the serum of Equidae in infectious anaemia and in dourine, III, 13. Proteinic viruses, III, 1105.
- Delahaye, G. See Berger, J.
- De Lamater, A. See Turner, K. B.
- De Lamater, E. D., and Benham, R. W., dermatophytes. I. Primary disease in laboratory animals. II. Immunity and hypersensitivity produced in laboratory animals, III, 426.
- De Lange, D., ontogeny of mammals as an evolution problem. I, III, 224.
- De Lange, J. J., Robertson, J. M., and Woodward, (Miss) I., X-ray crystal analysis of *trans*-azobenzene, I, 458.
- De Langen, C. D., central control of metabolism of fats, III, 500.
and Braak, J. G. ter, mechanical factors in blood pressure, III, 823.
and Grottepass, W., porphyrin and fat in experimental anaemia, III, 351. Porphyrin metabolism in blood breakdown and regeneration, III, 352.
- De Langen, K. W., Auger effect and relative intensity of *L*-emission lines, I, 113.
- Delaplace, R., and Bechard, C., determination of the freezing and boiling points, at reduced pressure, of ethylene glycol-water mixtures, I, 136.
- De Lapparent, J., attapulgit, I, 346. Lateritic decomposition of granite in the Macenta region (French Guinea), I, 498.
and Hocart, R., leverrierite from the lateritic formations of French West Africa, I, 346.
- De Lapparent, R., theory of montmorillonite, I, 587.
- Delarge, L. See Bouillenne-Walrand, M.
- De La Rue, E. A., mineralogical study of the French coast of Somaliland, I, 226.
- Delaunoy, A. L., radio-electric relay for thermo-regulators, I, 579. Device for faradic stimulation, III, 952.
See also Heymans, C.
- Delavault, R., chromium oxide deposit on magnesium, I, 34.
- Delaville, M., and Olive, M., micro-determination of magnesium in pure solutions and in blood-serum, I, 98.
and Russell, variation in hepatic and cerebral lecithins during morphine poisoning of guinea-pigs, III, 91.
- Delay, J. See Bertrand, I.
- Delbrück, M. See Ellis, E. L.
- Del Buono, P., biological action of X-rays, III, 868.
- Del Carlo, E. A. See Pete, A. G.
- Del Castillo, E. B., and Pinto, A., seasonal variations in seminal vesicles of white rats, III, 591.
- Deleano, N. T., and Dick, J., chlorophyll extraction and loss of chlorophyll during drying of leaves, III, 343.
- De L'Ecluse, G. See Mornet, J.
- Deleo, E. See Oliveri-Mandalà, E.
- Délépine, M., applications of isomorphism, I, 358. Nickel catalyst in hydrogenation of amino-5-cyano-2-methylpyrimidine, II, 88. Autoxidation of organic sulphur compounds, II, 403.
- De Lestrangé, Y. See Bovet, D.
- Delfosse, J., and Bleakney, W., dissociation of propane, propylene, and allene by electron impact, I, 503.
and Hipple, J. A., jun., dissociation of $\text{C}_2\text{H}_2\text{D}_2$ by electron impact, I, 114.
- Del Fresno, C., and De Lafuente, E., potentiometric determination of mercury with vanadium sulphate in alkaline solution, I, 99.
- Delimarski, J. K., and Berenblum, L. S., concentration cells of the amalgam type in fused salts, I, 267.
- Delisle, A. L., development of successive leaves in aster with respect to relative growth, cellular differentiation, and auxin relationships, III, 108.
- Deliwala, C. V., and Shah, N. M., aluminium chloride, new reagent for condensation of β -ketonic esters with phenols. IV. Condensation of 4-acetylresorcinols with ethyl acetoacetate, II, 485.
- Dellacà-Inzerillo, A., pharmacology of 3:5-dimethylisoxazole-4-carboxydiethylamide (cycliton). I. In frogs, rats, and rabbits, III, 864.
- Della Maggiore, B., micro-determination of sucrose in blood, III, 451.
- Dellamartina, F., time of urinary excretion of calcium acetylsalicylate, III, 1086.
- Dellen, T. R. van, and Miller, J. R., electrocardiographic changes following intravenous administration of magnesium sulphate in dogs, III, 655.

- Delmas, A., rôle of dorsal and ventral pancreas in constitution of definitive organ, III, 806.
- De Long, G. See Scott, R. D.
- De Long, W. A. See Smith, G. R.
- Delorenzi, E., changes in the contraction of embryonic, cardiac muscle *in vitro* due to cardiac drugs, III, 310. Effect of pharmaceutical substances on cardiac muscle cultured *in vitro*, III, 454.
- Delorme, G. See Riou, P.
- Delory, G. E. See King, E. J.
- De Loureiro, J. A. See Grabar, P.
- Delhaut, J. See Balansard, J., and Mercier, F.
- Del Regno, F. See Cedrangolo, F.
- Delrieu, A. See Hermann, H.
- Del Rio-Hortega, P., the microglia, III, 671.
- Delrue, G., purification of carboxyhaemoglobin by crystallisation, III, 8. Digestion; physiologie du tube digestif et des glandes, III, 386.
- Delsal, J. L., polarimetric and electrometric study of complex tartrates and malates of bivalent metals, I, 79. Polarimetric and electrometric study of complex tartrates and malates of tervalent and sexavalent metals, I, 79.
- Delsasso, L. A., Ridenour, L. N., Sherr, R., and White, M. G., artificial radioactivity produced by protons, I, 173. See also Fox, J. G., and White, M. G.
- De Lucia, P., and D'Ambrosio, L., allylamine poisoning, III, 191.
- and Morelli, A., effect of vitamin-B₁ on blood-phosphorus, III, 74. Effect of vitamin-B₁ on blood-sugar of normal persons and of persons suffering from hepatic and blood diseases, III, 74. Anterior pituitary and utilisation of galactose, III, 258.
- and Russo, P., blood-phosphorus in anæmia and leukaemia, III, 14.
- Delwaulle, (Mlle.) M. L., study by the Raman effect of balanced reactions in formation of mercuric chlorobromide and bromocyanide, I, 321.
- François, F., and Wiemann, J., constitution of cadmium iodide solutions; complete Raman spectrum of the cadmitetraiodide ion, I, 143. Study of cadmium bromide solutions by the Raman effect; complete Raman spectrum of the cadmitetrabromide [ion], I, 450.
- De Maesschalck, A. See Lederer, J.
- De Malleman, R., and Guillaume, F., magnetic rotatory power of electrolytic ions, I, 192.
- Demant, B. See Thilo, E.
- De Marchi, G. See Agnoli, R.
- De Marco, R., amylolytic activity of aqueous extracts of salivary glands of decapods, III, 146. Influence of "trachinus" poison on ability of the frog *gastrocnemius* to perform work, III, 190.
- and Imbesi, A., blood-sugar and body temperature, III, 12.
- Demarest, B., determination of vitamin-A by destructive irradiation, III, 919.
- Demassieux, (Mme.) N., and Fedoroff, B., dehydration of double cobalt potassium sulphate, I, 383. Dehydration of the double magnesium potassium sulphate, I, 426.
- De Meio, R. H., metabolism of dogs treated with fluorescein and 2:4-dinitrophenol, III, 709.
- De Melo, J. See Tavares, A.
- Demers, P., silver-silver carbonate electrode obtained by electrolysis, I, 479.
- Demeter, K. J., and Pfundt, R., behaviour of *Penicillia*, important in dairy practice, towards organic sources of nitrogen, III, 327.
- Demin, V. I., effect of seasonal factors on brain-lipins of frogs, III, 832.
- Deming, H. G., introduction to the phase rule. I, I, 473.
- Deming, (Mrs.) L. S. See Deming, W. E., and Wulf, O. R.
- Deming, W. E., and Deming, (Mrs.) L. S., physical properties of compressed gases. VI. Fugacity of carbon dioxide, I, 515.
- Demjanov, N. J., and Feofilaktov, V. V., cyclopropanone, II, 376.
- De Moerloose, J., effect of adrenaline and ephedrine on metabolism of non-anæsthetised dogs, III, 996.
- See also Heymans, C.
- Demole, M., and Issler, A., vitamin-C content of gastric juice, III, 852.
- and Perret, P. E., value of sedimentation rate in diagnosis of malignant transformation of a gastric ulcer, III, 8.
- See also Issler, A.
- Demole, V., dementia præcox, hypoglycæmia, insulin, vitamin-B₁, III, 131. Carcinogenic action of wheat-germ oil, III, 605. Pharmacology of vitamin-E; *dl*- α -tocopherol and its acetate, III, 605.
- and Bersot, H., insulin shock and analeptic shock in rabbits, III, 141.
- Isler, O., Ringler, B. H., Salomon, H., and Karrer, P., esters of α -tocopherol, II, 174.
- and Pfaltz, H., action of synthetic vitamin-E on neuro-muscular lesions of the offspring of *E*-hypovitaminotic rats, III, 404.
- See also Karrer, P.
- Demolon, A., and Dnnez, A., resistance of *B. radicola* to lysis by bacteriophages, III, 873.
- De Montmollin, R., administration of azoman as central convulsant, III, 671.
- De Moor, A. See Beesemans, A.
- Demoor, J., humoral complexes of the heart: activities of substances from the sino-aortic node, acetylcholine, and adrenaline, III, 122. "Potential reactions" of active substance of heart, III, 964.
- De Morsier, G., and Bersot, H., cerebral disorders in provoked hyperinsulinæmia, III, 131.
- Georgi, F., and Rutishauser, E., cardiazol convulsions in rabbits, III, 832.
- Monnier, M., and Streiff, E. B., retinal arterial pressure in cases of intracranial tumour: its value in localisation and its rôle in production of papilloedema, III, 903.
- De Moura, F. A., storage of protein in liver, III, 843.
- Dempsey, E. W., and Rioch, D. McK., localisation in the brain stem of the oestrous responses of the female guinea-pig, III, 466.
- See also Rioch, D. McK., and Young, W. C.
- Dempster, A. J., isotopic constitution of hafnium, yttrium, lutecium, and tantalum, I, 292.
- De Muro, P., action of atebirin in lamblia, III, 411.
- Denard, (Mlle.) L., rules governing the removal [from aqueous surfaces] of multimolecular films of stearic acid (Langmuir films), I, 609.
- Denes, S., iodometric micro-determination of potassium in serum, III, 556.
- Den Hartog Jager, W. A., central of peripheral action of bulbocapnine, III, 89. Determination of histamine in blood, III, 452. Blood-histamine in schizophrenics, III, 831.
- Denigès, G., sensitive micro-crystalline reactions of elementary bismuth and antimony, I, 158. Use of ammoniacal silver solutions in micro-crystalline qualitative analysis, I, 213. Potassium chlorate with sodium hydroxide as a dry reagent for manganese, I, 536.
- Denina, E., Kolbe's synthesis in electrolysis of butyric acid, I, 35.
- Denis, P., mitraspocaine, new alkaloid from *Mitragyna speciosa*, Korthals, II, 93.
- See also Courtois, J.
- Denisenko, J. I., contact changes of phenylcyclopentane homologues, II, 305. Hydrogenation catalysis of phenylcyclopentane and its homologues, II, 536.
- and Naber, A. D., α -cyclopentyl- δ -phenylbutane and its transformations, II, 305. Synthesis of homologues of phenylcyclopentane, II, 305.
- Denivelle, L., butane- β -diol and its esters, II, 296.
- Denkler, G., shock following transfusion, III, 353.
- Dennig, H., treatment of pernicious anæmia, III, 548.
- and Veiel, K., treatment of Graves' disease, III, 476.
- Dennis, C., and Kabat, H., behaviour of dogs after complete temporary arrest of cephalic circulation, III, 1036.
- Dennis, E. W., and Senekjian, H., leucocidal activity of typhoid filtrate, III, 945.
- Dennis, J., and Moore, R. M., potassium changes in the heart under conditions of ischæmia and congestion, III, 454.
- See also Hendrix, B. M., Moore, R. M., and Mullin, F. J.
- Dennison, D. M., interpretation of molecular spectra and study of molecular spectra in celestial objects. IV. Infra-red spectrum of water vapour, I, 354.
- See also Slawsky, Z. I.
- Denny, F. E., leaf-epinasty tests with chemical vapours, III, 534.
- De No, R. L., and Graham, H. T., recovery cycle of motoneurons, III, 370.
- Denolin, H. See Lequime, J.
- Denoyelle, L., and Sirand, E., effect of diet on the urinary elimination of ascorbic acid in healthy, nursing infants, III, 290. Elimination of ascorbic acid in children of 2—7 years, III, 291. Urinary excretion of ascorbic acid in healthy sucklings, III, 291.
- Denyssen, J. A. F., and Watterson, D. J., mechanism of cardiazol convulsions, III, 249.
- Denzer, B. S., and Horn, H., diffuse dilatation of pulmonary artery, III, 1031.
- Reiner, M., and Weiner, S. B., serum-calcium in newborn, III, 1028.
- Deobald, H. J., Christiansen, J. B., Hart, E. B., and Halpin, J. G., effect of partial or total oviduct removal on calcium content of blood of pullets, III, 619.

- De Oliveira, A. See Coelho, E.
- De Oliveira e Silva, J. B., formation of colloid by pituitary, III, 1047.
- Deotto, R., and Ricca, O., effect of uric acid on cell respiration, III, 405.
- De Potter, F., bactericidal action of aqueous solutions of essential oils, III, 880.
- Deppe, B., and Diefenhardt, H. H., analogous circulatory response to physical exercise and adrenaline intravenously, III, 235.
- and Wetterer, E., physical determination of stroke volume. I and II, III, 456.
- Deppe, M. See Windaus, A.
- Depper, R. See Sievers, K.
- De Rassenfosse, A. See Brasseur, H., and Etienne, H.
- De Renyi, G. S., and Hogue, M. J., studies on cardiac muscle cells, from chick embryos, grown in tissue culture, III, 15.
- See also Hogue, M. J.
- Derezini, T., atom factors of positive ions, I, 506.
- Derevici, A., and Derevici, M., blood changes produced by bee venom, III, 866.
- Derevici, M. See Derevici, A.
- Derevitzkaja, V. A. See Schorigin, P. P.
- Dérivé, M., application of p_H to speleology, I, 162. Glass electrodes, I, 280. Use of a new drop-test plate for examination under extreme conditions of p_H and r_H , I, 281. Thermoluminescence in several marbles, I, 346. Luminescence in the mineral kingdom, I, 436. Siliceous fossils, I, 498. Fluorescence of flavins, III, 287, 868. [Hazards of] work with bronze powders, III, 317.
- De Ritis, F., and Stofa, G., influence virus and adrenal gland, III, 912.
- Derjaguin, B., and Kussakov, M., anomalous properties of thin multimolecular films. V. Experimental investigation of multimolecular solvate (adsorbed) films as applied to the development of a mathematical theory of the stability of colloids, I, 562.
- Derkson, J. C., Heringa, G. C., and Weidinger, A., keratin and cornification, III, 2.
- Derlinden, L. V. See under Van Derlinden, L.
- Dermer, L. See Bénard, H.
- Dermer, O. C., and Dysinger, G. A., identification of olefines as dithiocarbimides, II, 197.
- and Lathrop, C., sodium ethylene carbide, II, 197.
- and Smith, R. B., identification of aromatic polynitro-compounds as addition compounds with naphthalene, II, 235.
- See also Dermer, V. H.
- Dermer, V. H., and Dermer, O. C., identification of naphthyl ethers as picrates, II, 59.
- De Robertis, E., seasonal variations in cytology of the liver of *Bufo arenarum*, III, 64. Cytology of liver in *Bufo arenarum* at high temperatures, III, 64. Effect of prolonged fasting on cytology of the liver of *Bufo arenarum*, Hens, III, 148. Origin and localisation of pigment in amphibian liver, III, 914. Relation between chondriome and iron and pigment metabolism in amphibian liver, III, 914.
- De Rooster, J. See Timmermans, J.
- De Ropp, R. S., vernalisation of cereals. IV. Effect of preliminary soaking of grain on growth and tropic responses of the excised embryo of winter rye, III, 798.
- Dérot, M. See Rathery, F.
- Derouaux, G., haemostatic effect of adrenoxine, III, 450. Threshold of haemostatic activity of ephedrine, III, 450. Haemostatic substances, III, 743. Sympathomimetic amines and mean bleeding time, III, 960. Haemostatic action of adrenochrome, III, 1051.
- Derow, H. A., Schlesinger, M. J., and Savitz, H. A., nephrosis from obstruction of the inferior vena cava, III, 694.
- Derr, P. F. See Vosburgh, W. C.
- Derrien, Y., partition of sodium, glucose, and urea between vitreous humour and serum in a selachian, III, 903.
- and Frizet, P., blood-water partition of diffusible constituents and nature of the aqueous humour, III, 156.
- See also Roche, J.
- Derry, D. R., geology of the Canadian Malartic gold mine, Northern Quebec, I, 586.
- Dershem, E., X-ray photography by means of fluorescence X-radiation, I, 580. Photomicrographs of thin bone sections by the use of fluorescence X-radiation, III, 344.
- Dervichian, D., different physical states of protein layers, I, 468. Correspondence between changes of state in two and in three dimensions, I, 562. Technique for the spreading of proteins and the "spreading number," I, 609.
- and Joly, M., higher-order transformations in unimolecular layers, I, 367, 562.
- De Sacy, G. S. See Lourau, M.
- Desaga, H. See Hoepke, H.
- Desai, B. N., Barve, P. M., and Paranjpe, Y. S., dialysis in the study of colloids. V. Colloidal gold. VI. Colloidal vanadium pentoxide, I, 416.
- Desai, D. M. See Prasad, M.
- Desai, R. D., and Ekhlās, M., Friedel-Crafts reaction. IV. Action of acetyl chloride and acetic anhydride on resorcinol and its derivatives; evidence for γ -substitution in the resorcinol nucleus, II, 23. Heterocyclic compounds. IX. Coumarins from substituted resacetophenones and acetoacetic ester, II, 173.
- Hunter, R. F., and Saharia, G. S., multiplanar cyclohexane rings, II, 21. cyclohexane series. IV. Isomeric 1-carboxy-4-, -3-, and -2-methylcyclohexane-1-succinic acids, II, 113.
- Desai, V. D. See Tawde, N. R.
- De Salamanca, F. E., behaviour of the normal stomach towards the stimulus of a test meal, III, 62.
- De Salas, E. See Nevell, T. P.
- De Sanctis, A. G. See Leslie, C. J.
- De Saram, G. S. W. See Cameron, G. R., and Stewart, M. J.
- Desbaillets, J. See Briner, E.
- Desbordes, J. See Paraf, J.
- Descamps, R., polarimetric study of the influence of temperature on aqueous solutions of *l*-malic acid, I, 564. Polarimetric study of the action of heat on aqueous solutions of *l*-malic acid, II, 468.
- Descazeaux, J., Guillot, G., and Courtade, R., production of a serum rich in anti-mallein sensitisers, III, 525.
- Deschalit, N. M. See Vasiliev, P. S.
- Deschamps, P. See Geloso, M.
- Deschiens, R. See Dopfer, C.
- Deschwanden, J. von, action of glutathione and of B-vitamins in infectious diseases, III, 1069.
- Desclin, L., effect of hypophysectomy on mammary gland in pregnant guinea-pig, III, 1047.
- De Selincourt, M., reproducibility of the platinum thermocouple at the freezing points of gold, silver, and antimony, I, 490.
- Desgrez, P. See Polonovski, M.
- Desguin, E., and Dauvillier, A., origin of life, III, 393.
- Deshapande, S. S. See Ruzicka, L.
- Deshmukh, G. V., and Wheeler, T. S., chalkones: reactivity of naphthyl *p*-alkoxystyryl ketones and their dihalides, II, 123.
- Deshpande, B. G., geology of Vengurla Peta, I, 437.
- De Silva, P. C. C., hereditary ectodermal dysplasia of anhydrotic type, III, 762.
- Désirant, M. See Keesom, W. H.
- Deslandres, H., application of the new analysis of molecular spectra, I, 6, 121.
- Desmaroux, Chédin, J., and Dalmont, R., Raman spectra of nitric acid in solution in ether and chloroform, I, 597.
- Desnuelle, P., and Fromageot, C., anaerobic decomposition of cysteine by *Bacterium coli*. I. Cysteinase, III, 721.
- De Somer, E., relation between the electrocardiogram and the contraction of the heart, III, 360.
- Desreux, V., and Herriott, R. M., existence of several active components in crude pepsin preparations, III, 1097.
- See also Dupont, G.
- Dessau, F. See Ladewig, P.
- D'Este, G., velocity of transformation of hypoiodite into iodate and mechanism of the reaction, I, 269.
- Destouches, J. L., algebraic theory of spin, I, 176.
- Destrian, G., electro-photo-luminescence, I, 126. Luminescence in electric fields and electronic phenomena in semiconductors, I, 452.
- and Loudette, G., influence of an electric field on shape of emission bands in electro-photo-luminescence, I, 301, 404.
- See also Allard, J.
- Desveaux, R. See Lemoigne, M.
- De Takats, G., and Biggs, A. D., congenital megacolon, III, 148.
- Deth, J. H. M. G. van, abnormality of inferior vena cava, III, 642.
- De Toni, G., and Graf, G., phosphorus esters in milk of woman, cow, and goat, III, 157.
- De Traverse, P. M. See Rangier, M., and Rathery, F.
- Detwiler, H. A., and Markham, F. S., bacteria occurring in commercial fowl-pox vaccine, III, 633.
- Deulofier, V., excretion of injected oestrone in the horse, III, 263.
- and De Labriola, E. R., acetylated aldnamides, II, 303.
- See also Cattaneo, P.
- Deuticke, H. J., and Harren, F., enzyme action under high pressure, III, 325.
- and Hasenbring, O., chemistry of isotonic and isometric muscular contraction under high pressure, III, 293.
- and Hollmann, S., hexose diphosphate in skeletal muscle, III, 567.

- Deutsch, B., and Engel, M., "sevenalil" anaesthesia in animal experiments, III, 86.
- Deutsch, V. See Paic, M.
- Deutsch, Y., sedimentation constant and mol. wt. of syphilitic reagin, III, 631.
- Deutschberger, O., Konigstein, R., Paschkes, E., Stern, K., and Willheim, R., physical chemistry of carcinolysis, III, 395.
- Deux, Y., isomerisation of dimethylvinylethylene oxide into α -dimethyl- Δ^2 -butenal; migration of vinyl, II, 46. Pinacolin change during the reduction of two molecules of mesityl oxide; migration of methyl, II, 202. Isomerisation of $\alpha\beta$ -oxido- α -phenyl- β -vinylbutane into α -phenyl- α -vinylbutaldehyde and dehalogenation of the corresponding iodohydrin to δ -keto- γ -phenyl- Δ^2 -hexene, II, 265. Dehalogenation of α -phenyl- β -propenyl glycol iodohydrin and isomerisation of the corresponding oxide, II, 420.
- and Abagam, D., dehydration of α -phenyl- β -propenyl glycol; formation of aldehyde (hydrobenzoin change) and ketone, II, 419.
- Dev, S. G., and Wheeler, T. S., chalkones; reactivity of chalkone oxides, II, 266.
- De Valera, E., and Kellar, R. J., effects of intravenous vasopressin on the toxæmia of pregnancy, III, 379.
- De Vault, D. C., and Libby, W. F., γ -radioactivity of 4-5 hours; ^{80}Br from radiobromate, I, 173.
- Devaux, H., and Pallu, L., layers of grains on mercury; possibility of realising, on the thin layers, the three principal dimensions of molecules, I, 74.
- Deveux, J., sensitisation of a silver iodide sol by hydrophilic colloids, I, 260.
- Deviaschina, S. A. See Drboglav, M. A.
- Devillers, J. See Palmer, Raoul.
- DeVilliers, J. See Boynton, D.
- Devons, S., scattering of α -particles in helium, I, 546. Resonance phenomena in scattering of α -particles by some light nuclei, I, 546.
- Devonshire, A. F. See Lennard-Jones, E.
- Devos, C. See Mund, W.
- De Vriend, J. A. See Liempt, J. A. M. van.
- Devrient, T. See Terroine, E. F.
- De Vries, A., connexion between Takata-Jezler and Mancke-Sommer reactions and globulin fractions of the blood, III, 554. Formolgel reaction and blood-proteins, III, 816.
- De Vries, H., and Diemer, G., artificial radioactivity of lead produced by neutrons, I, 443.
- De Vries, J., and Sizoo, G. J., efficiency of electron counters, I, 446.
- De Vries, T., and Strow, H. A., diphenylmethane as a thermometric standard at 25°, I, 461.
- See also Danforth, J. D.
- De Vries Robles, H., preparation and dipole moments of heterocyclic five-membered rings with one heterocyclic atom, I, 182.
- De Waele, H., and Vandeveld, J., correlation between systemic and pulmonary circulation and regulation of pulmonary circulation, III, 1031.
- Dewald, D. See Gregg, D. E.
- Dewan, J. G., co-enzyme-linked reactions involving $l(+)$ -glutamic dehydrogenase, III, 623.
- See also Corran, H. S.
- De Weerd, W. See Lapiere, S.
- De Wesselow, O. L. V. S., and Griffiths, W. J., role of adrenal gland and of the raised metabolism in production of organ hypertrophy in the thyroid-fed rat, III, 257.
- Dewey, P. H., and Harper, D. R., heats of combustion of anthracite cokes and of artificial and natural graphites, I, 27.
- De Wilde, H. See Bessemans, A.
- De Wilde, J. H. See MacGillavry, C. H.
- De Wisniewski, F. J., structure of atomic nuclei, I, 55.
- De Wit, J. J. D., ovipositor lengthening of the female bitterling produced by administration of progesterone, III, 587.
- De Witt, B. J. See Seltz, H.
- Dewitt, J. B. See Sure, B.
- De Worms, C. G. M. See Cook, James W.
- Dewulf, A., impregnation of neurofibrils, III, 809.
- See also Bogaert, L. van.
- Dey, B. B., and Govindachari, T. R., isoquinoline series. III. 1-Chloroalkylquinolines and their derivatives, II, 388.
- See also Spath, E.
- Deysach, L. J., erectile tissue of the penis and mechanism of erection, III, 642.
- Dhar, J., crystal structure of diphenylamine. I, I, 359.
- Dhéré, C., fluorescence spectra of two pigments from insects; lanigerin and atrobinin, III, 1007.
- and Castelli, V., comparative determination of absorption and fluorescence spectra of oxypenicillipsin and hypericin at ordinary temperatures and at the b.p. of liquid nitrogen, III, 1007.
- and Gourévitch, A., flavin content of diphtheria toxin broth, III, 726.
- Diac, C., pathogenesis of follicular cysts of the ovary, III, 684.
- Diakonov, I., and Tschitschenko, D. V., aliphatic chloro-compounds. XV. Chlorination of isobutylene, II, 530.
- Dial, W. R. See Adams, R.
- Diamond, L. B. See Hassin, G. B.
- D'Ianni, J. D., and Adkins, H., hydrogenation of hydroxy-amides, II, 445.
- Dias, E. See Da Cunha, A. M.
- Diatlovitskaja, B. I. See Morgulis, N. D.
- Diaz, C. J., Mendoza, H. C., and Rodriguez, J. S., vitamin-C and alkaptonuria, III, 925.
- Diaz, J. T., and Levy, S. E., experimental hypertension in the rat, III, 658. Indirect method for repeated determinations of blood pressure of rats, III, 967.
- Diaz, L. L. T., alkaloid-like material obtained from *Cundeamor* or *Mcmordica charantia*, III, 1019.
- Dibeler, V. H. See Vosburgh, W. C.
- Di Benedetti, S., γ -rays of different substances from the active actinium deposit, I, 442.
- Dibold, H., padutin and disturbances of peripheral circulation, III, 897.
- Dick, G. F. See Barron, E. S. G.
- Dick, J. See Deleano, N. T.
- Dick, M. See Ruffin, J. M.
- Dick, P. G. See Miller, H. C.
- Dicke, G. See Gaudin, A. M.
- Dickel, G. See Clusius, K.
- Dickens, F., retention of acids by serum determination with help of retention coefficients; use of the coefficient in manometric experiments, III, 357.
- Dickens, K. L. See Dechard, G. M.
- Dickens, P., recovery of laboratory reagents, I, 92.
- Dicker, E. See Kylin, E.
- Dickerson, V. C. See Barbour, H. G.
- Dickey, R. M., manganese in the Montreal Mine, Montreal, Wisconsin, I, 108.
- Dickie, L. P. N. See Thompson, W. O.
- Dickinson, E. M., and Beach, J. R., treatment of fowl coryza of chickens with argyrol, III, 189.
- and Hinshaw, W. R., treatment of infectious sinusitis of turkeys with argyrol and silver nitrate, III, 189.
- Dickinson, R. G. See Lassetre, E. N.
- Dickinson, S., glass electrode for measurement of p_{H} of fluids at body temperature, III, 639.
- Dickson, H. L., and Ingersoll, A. W., terpenoid amines. I. Isomeric thujylamines, II, 515.
- See also Stoughton, R. W.
- Dickson, R. C. See Graham, D.
- Di Delupis, S. D., activation in growing plants. I.—III, III, 213.
- Diebner, K., and Grassmann, E., artificial radioactivity. IV., I, 294.
- Dieckhoff, J., effects of diphtheria on metabolism, III, 706. Protein metabolism in diphtheria intoxication, III, 706. Sodium and chloride metabolism in diphtheria intoxication, III, 709.
- Dieckmann, W. J., Michel, H. L., and Woodruff, P. W., the cold pressor test in pregnancy, III, 481.
- Diederichsen, J. See Mumm, O.
- Diedrich, P. See Dohrn, M.
- Diefenhardt, H. H. See Deppe, B.
- Diehl, F., anaphylactic shock and vitamin-C saturation, III, 921. Prophylaxis and treatment of B-hypovitaminoses with concentrated yeast, III, 1069.
- and Kirchmann, L., [action of vitamins in sugar tolerance in pituitary cachexia], III, 708.
- and Neumann, H., vitamin-C content of the human brain, III, 704.
- Dieke, G. H., characteristics of the Eagle mounting of the concave grating, I, 491.
- See also Wood, R. W.
- Diemair, W., and Fox, H., determination of small amounts of arsenic, I, 336. New azo-compounds and iodo-derivatives of histidine and histamine, II, 88.
- and Weiss, K., plant phosphatides and lecithin. V. Phosphatide of lupins, III, 951.
- Diemer, See Dienst, C.
- Diemer, G. See De Vries, H.
- Dien-Siang, W. See Florence, G.
- Dienst, C., relation between stomach and kidneys, III, 690. Hypoglycæmia and hypoglycæmic shock, III, 818.
- Diemer, and Scheer, K., action of vitamin-B and -C in diabetics, III, 702.
- Dierchen, W., action of neutral salts on bacterial cell membranes, III, 530.
- Dierdorp, S. See MacGillavry, C. H.
- Dieryck, J. See Berthelot, A.
- Diesselhorst, G., hearing in fish without Weber's apparatus, III, 134.
- Diétel, H., and Herrmannsen, J., ergometric test of operability, III, 154.
- Dieterle, H., percolators and perforators, I, 161.

- Dieterle, H., and Fay, K., constituents of the flowers of *Arnica montana*, L. I., III, 536.
- and Schwengler, K., xanthoxylins S, a constituent of *Xanthoxylum carolinianum*, II., II, 171.
- Diell, K., prophylaxis and therapy of whooping cough, III, 184.
- Dietrich, D., influence of carcinogenic substances on regeneration of the skin of mice, III, 281.
- Dietrich, H., clinical experiences with dolantin, III, 776.
- See also Rabald, E.
- Dietrich, H. F., acute pyuria due to dysentery bacilli [treated with ammonium mandelate], III, 1085.
- Dietzel, E. See John, W.
- Dietzel, R., and Stadelman, L., decomposition of alkaloids in aqueous solution. IX. Photochemical change of codeine and codeinone, II, 130.
- Diev, N. P., and Kariakin, J. V., oxidation of sulphides in oxygen-enriched air. I. II. Oxidation of Cu_2S . III. Oxidation of zinc sulphide, I, 205, 274, 477.
- Diggs, L. W., and Bibb, J., erythrocyte in sickle cell anemia, III, 547.
- Digilio, V. A., Pescatore, J. A., and Goldberg, H. E., lethal differences between pancreatic extract (Wolfe) and acetyl- β -methylcholine in atropinised animals, III, 387.
- Digonnet, L., passage of *p*-aminobenzenesulphonamide (1162 F.) across the placenta, III, 859.
- See also Lvov, A.
- Di Giorgio, A. M., structure of the brain stem regulating dorsal flexure of the head in guinea-pigs during swimming, III, 129. Effect of respiratory resistance on latent time and characteristics of the persisting optical image, III, 133. Voluntary apnoea. I. Changes due to air at varying temperatures. II. Habitual apnoea with air at varying temperatures. III. Composition of alveolar air during apnoea with air at varying temperatures, III, 462. Reflex adaptations to swimming in guinea-pig, III, 828.
- and Castelli-Borgiotti, G., nystagmus, III, 30.
- and Ferraloro, G., effect of respiratory resistance on reaction time and differentiation of light intensity, III, 125.
- See also Ferraloro, G., and Rossi, Gilberto.
- Digonnet, L., treatment of experimental streptococcal meningitis with organic sulphur compounds, III, 774. Activity of organic sulphur derivatives in experimental staphylococcal peritonitis in mice, III, 774. Comparative effects of organic derivatives of sulphur on experimental streptococcal infection in mice, III, 795.
- Digregorio, N. J., and Crawford, J. H., auricular flutter with complete heart block, III, 558.
- Dihn, P. See Klement, R.
- Dijk, C. P. van. See Reith, J. F.
- Dijk, P. J. S. van, regulation of labyrinthal respiration in *Osphromenus gurami*, III, 823.
- Dijkema, K. M. See Lifschitz, I.
- Dijkstra, B., excitability [of muscle and nerve] in hyperpnoea, III, 1035.
- and Dirken, M. N., effect of forced breathing on motor chronaxie, III, 827.
- Dijkstra, L. J. See Gorter, C. J.
- Dijkstra, N. D. See Brouwer, E.
- Dikshit, B. B., acetylcholine formation by tissues, III, 471.
- Dill, D. B. See Adolph, E. F., Brouha, L., and Chapman, E. M.
- Dill, J., purgative action of triacetyl-diphenolisation (laxagetten), III, 613.
- Dill, L. V., and Erickson, C. C., eclampsia-like syndrome occurring in pregnant dogs and rabbits following renal artery constriction, III, 275.
- and Isenhour, C. E., etiologic factors in experimentally produced pontine hemorrhages, III, 829.
- Dille, J. M., inactivation and elimination of picrotoxin, III, 88.
- See also Masuda, M., and Tainter, M. L.
- Dillingham, W. B., and Reid, E. E., derivatives of *s*-triethylbenzene, II, 13.
- Dilthey, W., and Graef, E., highly arylated compounds. VIII. Derivatives of tetraphenylthiophen, II, 84.
- and Passing, H., migration of ester groups in the hydroxylated phenyl- β -naphthylamine series, II, 314. Heteropolarity. XXXV. Action of nitrosodimethylaniline on phenylcyclohexane, II, 326.
- Quint, F., and Heinen, J., pyrenium compounds. XXXII. Dehydrenium dyes. II., II, 223.
- Quint, F., and Stephan, H., pyrenium compounds. XXXIII. Dehydrenium. III. Action of auxochromes in the *meta* and *para* positions of dehydrenium dyes, II, 224.
- and Stephan, H., pyrenium compounds. XXXIV. Structure of the dibenzoxanthones, II, 224.
- Dima, G. A., and Pogăncău, P., ultra-violet absorption spectra of acridine, ethyl-, pentadecyl-, and phenyl-acridine, I, 354.
- Di Maggio, D. See Giacalone, A.
- Di Mattei, P., absorption from the alimentary canal; pharmaceutical substances, III, 64.
- Dimick, M. K., and Schreffler, C. B., factor I (vitamin- B_6) requirement of the rat, III, 495.
- Dimitracoff, C., ouabain Arnaud, III, 183.
- Dimitrijević, G. M. See Pushin, N. A.
- Dimock, A. W., variation in a species of *Fusarium* induced by high concentrations of zinc salts, III, 326.
- Dimroth, K., ultra-violet absorption spectra and constitution of organic molecules, I, 507.
- and Jonsson, H., attempted synthesis of the antirachitic vitamin. III., II, 70.
- and Paland, J., ultra-violet irradiation of $\Delta^{5,7}$ -androsteradiene-3:17-diol, II, 112.
- Dimschitz, R. A., pathogenesis of sequelae of acute hemorrhage, III, 364.
- Dimter, A. See Waelsch, H.
- Dinaburg, A. D., reticulo-endothelial system (microglia) in cerebral tumours, III, 129.
- Dinard, C. See Chevallier, A.
- Dinerman, J. B., use of anti-reticular cytotoxic serum [in malignant disease and septicemia], III, 490.
- Dingemans, P., melting lines of potassium thiocyanate with potassium chloride, bromide, and iodide, I, 419. Vapour pressure of solutions saturated with potassium thiocyanate and with potassium chloride, bromide, or iodide, I, 419.
- Dingenen, W. van, test of Polanyi's theory of adsorption by means of adsorption measurements on glass and wood charcoal with different gases below the critical temperature, I, 315.
- and Itterbeek, A. van, adsorption of hydrogen and deuterium on charcoal between 90° and 17° K., I, 139.
- See also Itterbeek, A. van.
- Dinger, A. See Ruggli, P.
- Dingle, J. H. See Fothergill, L. D.
- Dinglinger, A. See Schulz, G. V.
- Dingwall, M., jun. See Boyd, E. M.
- Dinsmore, R. S., preoperative considerations of jaundiced patient, III, 1059.
- Dion, M. See Aitoff, J.
- Di Palma, J. R. See Johnson, J. R.
- Di Paola, G., cyclical vaginal response to continuous oestrone treatment in adrenalectomised castrated rats, III, 982.
- Dippy, J. F. J., Jenkins, H. O., and Page, J. E., electrical conductivity of univalent salts in acetone, I, 567.
- Dirken, M. N. See Dijkstra, B.
- Dirr, K., mechanism of the Takata reaction. III., III, 119. Serum-protein [and bilirubin] changes, III, 553. Degradation of amino-acids and serum-proteins. II. β (+)-Arginine; problem of cancer, III, 770.
- and Mayer, K., mechanism of the Takata reaction. II., III, 119.
- and Platiel, M., mechanism of the Takata reaction. I., III, 119.
- and Sereslis, N., causes of differences in results of serum-bilirubin determinations, III, 230.
- and Strehle, J., degradation of amino-acids and serum-proteins. I. β (+)-Arginine in filtrate from protein after administration of the amino-acid, III, 770.
- Dirschel, W., sex hormones and related substances. XII. Comparison of cinchol with sitosterol and stigmasterol, II, 157.
- Di Somma, A. A. See Landsteiner, K.
- Distanov, G. K., certain properties of aqueous ammoniacal solutions as mixed solvents, I, 81.
- Di Stefano, G. See Zagami, V.
- Ditchburn, R. W., photo-electric absorption of radiation in gases, I, 6. Rapid visual test for vitamin-A deficiency, III, 494.
- and Roulston, K. I., sputtering of oxide-covered magnesium surfaces, I, 181.
- Ditt, F. W. See Meisenheimer, J.
- Dittmar, C., distribution of thorium-B in the body after injection, III, 89.
- Dittrich, H., composition of mare's milk, III, 489.
- Divry, P., Lissauer's paralysis, III, 669.
- Dix, W. M. See Foster, L. S.
- Dixit, K. R., thixotropy of liquid helium? I, 460.
- Dixon, C. F. See Clark, R. L., jun.
- Dixou, H. M. See McCutcheon, M.
- Dixon, K. C., metabolic explanation for irritation and coma produced by rise in intracranial pressure, III, 470.
- Dixon, M., and Zerfas, L. G., lactic dehydrogenase and cytochrome, III, 719.
- Dixon, R. K. See Kepler, E. J.
- Djakova, M. K., and Lozovoi, A. V., hydrogenation of homologues of benzene under pressure. II., II, 305.
- See also Lozovoi, A. V.
- Djourichitch, M. See Richou, R.
- Djourkovitch, O. See Goldschmidt, B.

- Djournio, A. See Strohl, A.
- Dmitriev, N. N., isomerism of the nuclei of uranium-Z and uranium-X₂, I, 117.
- Dmitrijev. See under Dmitriev.
- Dmochowski, L., serologic specificity of the pus of various animals, III, 119. Serologic specificity of Murray's lipo-sarcoma of the guinea-pig, III, 279. Serologic specificity of Brown-Pearce rabbit tumour, III, 279. Serological specificity of experimental animal tumours, III, 395.
- Dneprov, G. F. See Shukov, I. I.
- Doak, B. W., amino-acids and rooting of cuttings, III, 1110. Determination of hydrocyanic acid in white clover: some abnormal results, III, 1111.
- Doan, C. A. See Wilson, S. J.
- Doan, D. J. See Robinson, R. J.
- Doane, C. P., glomus tumour (glom-angioma), III, 746.
- Dobbelstein, O., raised vitamin-C consumption during pyrexia, III, 768.
- Dobbins, J. M., Rappaport, H., and Brescia, M. A., sulphapyridine in treatment of lobar and broncho-pneumonia in infants and children, III, 928.
- Dobbins, J. T., Markham, E. C., and Edwards, H. L., scheme of qualitative analysis, involving the use of organic reagents, I, 338.
- Dobbs, R. H., eumydrin in pyloric stenosis, III, 308.
- Dobiński, S., adsorption of constituents of a solid phase on the surface, I, 22. Structure of polished metallic surfaces, I, 304.
- and Jagielski, A., adsorption in the solid phase, I, 316.
- Dobkina, B. M. See Tzivina, B. S.
- Dobratz, E. H. See Shriner, R. L.
- Dobref, M., and Kaltscheff, I., gastric secretion after typhoid fever, III, 689.
- Dobrianski, A. F., and Saprikin, F. J., mechanism of aromatisation; thermal isomerisation of the xylenes, II, 537.
- Dobriner, K., and Rhoads, O. S., determination of urinary coproporphyrin, III, 487.
- Strain, W. H., Guild, H., and Localio, S. A., excretion of porphyrins on congenital porphyria, III, 171.
- Dobrińska, A. A., and Neuman, M. B., polarographic method in organic chemistry. I. Electroreduction of peroxides, I, 624.
- Dobronravina, P. P., TiO bands in the spectra of stars, I, 238.
- Dobrotin, N., Ivanova, N., and Isaev, B., back-ray showers, I, 236.
- Dobrovolsky, E. See Spath, E.
- Dobrovolskaia-Zavadskaia, N., minimum dose of 1:2:5:6-dibenzanthracene capable of producing cancer in mice by a single subcutaneous injection, III, 396.
- and Nekhorocheff, I., quantitative study of the growth of spontaneous tumours and tumours produced by 1:2:5:6-dibenzanthracene in mice, III, 848.
- and Pezzini, Z. M., degeneration of adrenal cortex in different strains of cancer mice, III, 976.
- and Wolff, H. M., incidence of mammary epithelioma in different strains of mice, III, 984.
- and Zéphiroff, P., adrenals in cancerous mice, III, 42.
- Dobry, (Mme.) A., coacervation. I. Experimental. II. Osmotic pressure, I, 198, 418.
- Doby, T., and Weisinger, I., changes during scurvy in adrenaline content of blood and adrenals of normal and thyroidectomised guinea-pigs, III, 75.
- Dock, W., theories about pernicious anaemia, III, 116.
- See also Galgiani, J. V.
- Dockerty, M. B., arrhenoblastoma, III, 985.
- Docking, A. R., and Heymann, E., lyotropic series. II. Adsorption of salts on gelatin, I, 320.
- Doctor, N. S. See Giri, K. V.
- Dodd, C. See Andrade, E. N. da C.
- Dodd, H., and Hunter, J. T., cyclopropane "sleep" with percaïne spinal anaesthesia, III, 508.
- Dodds, E. C., modern chemistry, modern medicine, and modern food, III, 1006.
- Golberg, L., Lawson, W., and Robinson, (Sir) R., synthetic oestrogenic compounds related to stilbene and diphenylethane. I, II, 312.
- Liu, S. H., and Noble, R. L., water balance and blood changes following posterior pituitary extract administration, III, 48.
- and Robertson, John Douglas, analysis and differentiation of composition of iron, phosphorus, and calcium compounds in respect of nutritional requirements. IV. Calcium compounds in relation to nutrition, III, 701.
- See also Campbell, N. R.
- Dodé, (Mme.) See Mouren, H.
- Dodé, M., influence of solubility of a metal in its oxide on the chemical stability of the latter; interpretation of phenomena observed with cadmium oxide, I, 264.
- Halban, H. von, jun., Joliot, F., and Kowarsky, L., energy of neutrons liberated during nuclear partition of uranium, I, 350.
- See also Mouren, H.
- Dodero, M., electrolysis of molten alkali and alkaline-earth silicates, I, 152. Electrolysis of fused mixtures of alkali silico-fluorides and fluorides or oxides, I, 271.
- Dodge, E. F., and Frost, T. T., relation between blood plasma-proteins and toxæmias of pregnancy, III, 265.
- Dodson, R. J. See Potts, W. M.
- Dodson, R. W., and Fowler, R. D., radioactive halogens produced by the neutron bombardment of uranium and thorium, I, 350. Halogen-halide exchange reactions in aqueous solution, I, 375.
- See also Fowler, R. D.
- Doebbeling, S. E. See Caldwell, M. L.
- Döderlein, G., treatment of peripheral disturbances of the circulation in women, III, 562.
- Döderlein, R. See Friese, H.
- Doehner, K. See Kuntzel, A.
- Döll, W., and Klemm, W., bi- and quadrivalent compounds of the rare earths. VII. Structure of dihalides, I, 381.
- See also Klemm, W.
- Doeller, W. See Borsche, W.
- Doenges, J. L., spirochætes in the gastric glands of *Macacus rhesus* and of man without related disease, III, 630.
- Doerbecker, H. J. See Jaensch, W.
- Döring, H., photosensitization of gene, III, 319.
- Döring, W., problems of ferromagnetism, I, 513.
- Doermann, F. W. See Halpern, O.
- Dørum, K. G. See Vegard, L.
- Doesschate, G. ten, and Fischer, F. P., representation and consideration of perspective, III, 837.
- Dœuvre, J., methylgeraniolene and its pyrolysis, II, 238. l-Citronellol, II, 355. Action of organo-magnesium derivatives on pulegone, II, 380.
- Dognon, A., photo-electric diffusion-absorption meter, I, 538. Optical determinations without the use of coloured standards, III, 221. Optical determination of hæmoglobin without the use of coloured standards, III, 221.
- and Abribat, M., apparatus for determining surface tension and elasticity, I, 539.
- and Piffault, C., action of various radiations on surface films of proteins, I, 256. Absence of heat-denaturation of surface solutions of serum-albumin, I, 256.
- See also Abribat, M., and Courrier, R.
- Dohan, F. C., analysis of insulin response of rabbits after injection of diabetic serum, III, 50.
- Jeffers, W. A., and Creskoff, A. J., blood pressure and hæmatology in dogs injected with anterior pituitary extract, III, 258.
- and Lukens, F. D. W., persistent diabetes [mellitus] following injection of anterior pituitary extract, III, 577.
- Dohan, J. S., and Woodward, G. E., electrolytic reduction and determination of oxidised glutathione, II, 410.
- Doherty, M. M., Suh, T. H., and Alexander, L., new modifications of benzidine stain for study of the vascular pattern of the central nervous system, III, 251.
- Dohmen, A., scarlatiniform rash in infection by *Staphylococcus aureus hæmolyticus*, III, 332.
- Dohrn, M., and Diedrich, P., albusid, a new sulphanilic acid derivative, III, 410.
- Doisy, E. A. See Binkley, S. B., MacCorquodale, D. W., McKee, R. W., Smith, G. V., Thayer, S. A., and Westerfeld, W. W.
- Doladilhe, M., irretractile coagulation, III, 230. Extraction of hæmolysin from the plasma gel obtained from a hæmolytic serum, III, 451. Extraction of hæmolysin, III, 819.
- and Mazille, M., separation of globulin from blood and isolation of the viscous protein, III, 118. Fixation of dyes by a single constituent of the blood-protein system *in vitro*, III, 553. Behaviour of electro-negative colloidal dyes in the blood stream, III, 818. Purification of the viscous protein from immunised serum, III, 879. Physical properties of globulin fractions of fresh and heated serum, III, 961.
- Dolan, M. E. See Lucas, C. C.
- Dolar, P. See Samec, M.
- Dold, H., Du, D. H., and Dziao, S. T., antibacterial, heat- and light-sensitive substances (inhibins) in natural honey, III, 337.
- Doldi, S., physico-chemical characteristics of hydronaphthalenes. I, I, 64.
- Dole, K. K. See Karve, D.
- Dole, M., relation between glass electrode theories of Nikolsky and Dole, I, 613.
- See also Swartout, J. A.

- Dolejšek, V., Bačkovský, J. M., and Faus, J., hyperfine structure of X-ray [spectrum] lines, I, 51.
- and Ježek, M., resolving power and penetration of X-rays in mosaic crystals, I, 64.
- and Rozsival, M., focussing [of X-rays] with the Seemann knife, I, 103.
- and Tayerle, M., limit of the separating power of X-ray spectrographs using a method of focussing with a crystal of variable curvature, I, 159.
- and Žadkevič, C., absorption spectra and optical electrons of trivalent ions of the rare earths, I, 448.
- Dolger, H. See Adlersberg, D., and Pollack, H.
- Dolin, B. G. See Hatch, T.
- Dolin, B. H. See Greenburg, L.
- D'Oliveira, B., can rusts fix nitrogen? III, 1098.
- Doljanski, L., and Hoffman, R. S., stimulation of growth of fibroblast cultures by adult heart extracts, III, 1024.
- See also Halberstaedter, L.
- Dolkart, R. E., Jones, K. K., and Brown, C. F. G., chemical factors in formation of gall-stones, III, 66.
- See also Brown, C. F. G., and Chor, H.
- Doll, W. R. S. See Richardson, J. S.
- Dols, M. J. L., total phosphorus and lipin-phosphorus in normal and rachitic rats, III, 297.
- Jansen, B. C. P., Sizoo, G. J., and Barendregt, F., phosphorus metabolism in normal and rachitic rats with a radioactive phosphorus isotope. II. Total and lipin-phosphorus contents and formation of lipin-phosphorus, III, 80.
- Jansen, B. C. P., Sizoo, G. J., and Maas, G. J. van der, distribution of phosphorus in the leg bones of chickens, III, 302.
- Domagk, G., aetiology of malignant disease, III, 489.
- Domange, L., stability of manganic sulphate in aqueous sulphuric acid solutions, I, 211. Apparatus for the study of systems comprising one liquid and one solid phase, I, 494. Manganic sulphate; decomposition by rise of temperature; solubility; hydration, I, 575.
- Domariski, T., and Skudrzyk, J., di-(β -dihydroxypropyl)oxamide and its nitration products, II, 496.
- Demarus, A. von, use of sedimentation rate, III, 1026.
- Domenici, F., formation of alcohol in the blood of cadavers. I. and II., III, 120, 962, 1030. Effect of drugs, administered before death, on blood-alcohol determination in cadavers, III, 963.
- Donati, S., and Reck, W., blood-alcohol curve and healing of bone fractures in drinkers, III, 962.
- Domenjot, R., action of substances related to adrenaline on intestinal veins, III, 1001.
- and Fleisch, A., action of drugs on veins, III, 897.
- Domini, G., effect of bile and its constituents on *in-vitro* respiration of muscle tissue, III, 127. Oxygen consumption of muscle tissue in media containing bile and sodium oxalate, III, 127. Acetylcholine-esterase activity of various tissues during embryonic and early, post-natal life, III, 394.
- Domini, G., oxygen consumption of muscle tissue in presence of small amounts of sodium oxalate, III, 405. Effect of bile on respiration of tissue slices, III, 606. Effect of oxalic acid on respiration of tissue slices, III, 606. Physico-chemistry of alimentary mucins. I. Isoelectric point. II. Solubility as function of pH , III, 690, 985.
- and Colombini, N., acetylcholine-esterase activity of serum and haemolysed blood of dogs, III, 452.
- Dominicus, K. See Martini, P.
- Dominikiewicz, M., structure of hexamethylenetetramine; action of chloro-compounds of sulphur on urotropin, II, 359. Therapeutically active triphenylmethane dyes, II, 366.
- and Kijewska, M., synthesis of diallyl-acetic acid [heptadienecarboxylic acid], II, 355. Mercury-organic allyl derivatives, II, 360.
- Domnin, N. A., possibility of existence of cyclic systems having a triple linking. II. Synthesis of cyclooctinene, II, 53.
- Donaggio, A., reversible organic lesions in central and peripheral nerve fibres during local anaesthesia, III, 465.
- Donahoe, C. See Benedetti-Pichler, A. A.
- Donahue, J. K., effects of oestrogenic hormone on the sex cycles of normal rats, III, 57.
- Donald, H. P., sources of variation in human birth weights, III, 805.
- and Raventos, J., influence of age and weight of pigs on response to sodium evipan, III, 714.
- Donaldson, G. A. See Cope, O.
- Donaldson, J. K., and Cameron, R. R., use of silk, catgut, and Noble plication with reference to abdominal adhesions, III, 691.
- Donaldson, R., spectrophotometry of reflecting materials, I, 625.
- Donalies, G., insulin therapy of schizophrenia, III, 131.
- Donatelli, L., action of ergobasine on the heart, III, 85. Mechanism of action of ergobasine on the heart, III, 85. Mechanism of action of ergobasine [ergometrine] on the heart, III, 309. Action of quaternary ammonium salts on the chemo-receptors of the carotid sinus, III, 309. Peripheral action of ergometrine on sympathetic nerves; blood pressure and uterus, III, 612. Spleen-reducing effect of quaternary ammonium bases, III, 712. Mechanism of inhibition and paralysis of vasomotor reflexes from carotid sinus by ergobasine [ergometrine], III, 966.
- and Abbate, R., comparative toxicity and respiratory and blood-pressure effects of narcotics of the barbituric acid series, III, 507.
- and Jannetti, D., haemostatic effect of pectin and of methylpolygalacturonide, III, 960.
- and Shen, T. C. R., effect of various drugs on carotid sinus reflexes, III, 22. Pharmacology of vasomotor reflexes from the carotid sinus, III, 308.
- See also Mancini, M. A.
- Donati, D., effect of extirpation and grafting of adrenal glands on serum-calcium and -potassium, III, 139. Histocytes in circulating blood and their diagnostic value in disease, III, 349.
- Donati, S. See Domenici, F.
- Donato, B. G., urea in blood of silkworms at the fifth stage of development and in excrement during development of larva and chrysalis, III, 68. Urea and larval development of various races and crosses of silkworm, III, 69.
- Donau, J., micro-electrolytic determinations in small amounts of liquid, I, 389. Handling of small amounts of precipitate, I, 539.
- Donelson, J. G. See Harned, H. S.
- Donen, I., deciduous fruit. III. Chemical changes in Kelsey and Gaviota plums during growth, III, 1017. Role of sorbitol in carbon metabolism of the Kelsey plum. I. Changes in chemical composition during growth and storage, III, 1109.
- Dongen, K. van, action of novocaine on fibrillation of the heart, III, 85. Action of (para)sympathol on fibrillation of the heart, III, 931.
- See also Dongen, U. G. van.
- Dongen, U. G. van, and Dongen, K. van, experimental therapy of flutter and fibrillation of the heart, III, 359.
- Donhoffer, S., and Liposits, E., insulin requirements and type of diabetes, III, 380. Insulin requirements and type of diabetes mellitus, III, 754.
- Doniach, I., comparison of photodynamic activity of carcinogenic with non-carcinogenic compounds, III, 1062.
- Doniger, C. R. See Cameron, G. R.
- Donjon, P. See Piéry, M.
- Donnadei, G., therapeutic action of sulphur vapour in otolaryngology, III, 904.
- Donnan, F. G., Ludwig Mond, I, 494. Garner principle of co-operative activation, I, 616.
- Donnat, L. See Roche, J.
- Donnay, J. D. H., significance of crystal habit, I, 304.
- Donnelly, G. L. See MacNider, W. de B.
- Donnelly, J. L., metabolism of fat and carbohydrate, III, 299. Role of water in glucose metabolism, III, 772.
- Donnelly, M. W. See Beck, W. A.
- Donnelly, R. P., fillings for the sheaths of mercury-in-steel thermometers, I, 280.
- Donnet, V. See Chosson, J., and Mal-méjac, J.
- Donovan, P. B. See Goodpasture, W. C.
- Donskaja, D. B., and Portnov, M. A., solubility of zinc and cadmium nitrates in liquid ammonia, I, 518.
- Donskova, T. N., effect of changes in intracranial pressure on the course of anaphylactic shock, III, 132.
- Dontas, S., therapeutic use of saline in neurological and psychiatric conditions, III, 830.
- Dontcheff, L., effect of injections of insulin on rate of oxidation of alcohol in rats, III, 856. Parallelism between readaptation to utilisation of carbohydrates and rate of oxidation of alcohol after prolonged fasting in white rats, III, 856. Effect of ingestion of thyroid gland on rate of oxidation of alcohol in white rats, III, 908.
- Doody, T. C. See Randall, M.
- Dopter, C., and Deschiens, R., effect of bilirubin and total bile on dysentery amoeba, III, 327. Effect of bile salts and cholesterol on dysentery amoeba, III, 327.
- Dor, L. See Swings, P.

- Dor, M., functional recuperation and metabolism of kidney after ligaturing the artery, III, 759. Consumption of oxygen and carbon dioxide balance of normal denervated kidney under narcosis, III, 759.
- Dorabialska, A., possible radioactivity of antimony, I, 232.
- and Maslowski, E., application of Millikan's method to study of feeble radioactivity, I, 231.
- and Turska, E., photographic studies in the domain of feeble radioactivity, I, 231.
- Doran, R. L. See Henderson, W. J.
- Doran, W. J., and Shonle, H. A., dialkylthiazolidinediones, II, 90. 5-Alkyl-5-crotylbarbituric acids, II, 344.
- Dordick, J. R., diverticula of the vermiform appendix associated with an overgrowth of nerve tissue and partial mucocele, III, 592.
- Dorello, F., and Rowinsky, P., oxygen embolism, III, 462.
- Doren, C. A. van, bound water and electrical conductivity as measures of cold-resistance in winter wheat, III, 211.
- Dorff, G. B., and Stoloff, B., abdominal distension; manifestation of possible thyroid insufficiency in children, III, 909.
- Doriman, R. I., and Hamilton, J. B., urinary excretion of androgenic substances after intramuscular and oral administration of testosterone propionate in man, III, 385. Urinary excretion of androgenic substance after administration of testosterone propionate to the immature monkey, III, 982. Urinary excretion of oestrogenic substances after administration of testosterone propionate, III, 1057.
- and Wagenen, G. van, excretion of sex hormones in urine of adult male monkeys, III, 53.
- See also Efron, B. G., and Hamilton, J. B.
- Dorfmueller, W., action of light and growth substance on the rooting of cuttings of Commelinaceae, III, 437.
- Dorier, A., rhythmic movement of pike's eggs, III, 757.
- Dorn, H. W., Warren, W. H., and Bullock, J. L., derivatives of the ethers of hydroxyquinol, II, 110.
- Dornesco, G. T., nature of Golgi apparatus in spinal ganglion cells of vertebrates, III, 569.
- Dornfeld, E. J. See Slater, D. W.
- Dornow, A., synthesis of 2:6-dimethylpyridines substituted in position 3, II, 487.
- See also Baumgarten, P.
- Dornie, R. W., and Ferguson, C. V., solubility of nitrogen and oxygen in liquid sulphur dioxide, I, 194.
- Doro, B., chemical and physico-chemical analysis of the Roman hot-springs at Monfalcone, I, 392. Physico-chemistry of thermal water of Monfalcone, I, 628.
- Dorochov, L. M., effect of carbon dioxide on transpiration and stomatal apparatus in plants, III, 731. Dynamics of carbohydrate accumulation in plant leaves as influenced by the carbon dioxide content of air, III, 731. Alteration of physiological processes in tomato under the influence of *Cladosporium fulvum*, Cke., III, 732.
- Dorogan, D. See Rascanu, V.
- Dorr, E. M. See Greene, R. R.
- Dorriner, K., Rhoads, C. P., and Lavin, G. I., conversion of 1:2:5:6-dibenzanthracene by rabbits, rats, and mice, III, 1063.
- Dorris, F., production of pigment *in vitro* by chick neural crest, III, 224.
- Doss, K. S. G., electric double layer, an effective potential barrier for the accumulation of the solute at surfaces of solutions of capillary-active electrolytes, I, 21. Ageing of surfaces of solutions. IV. Nature of the potential limit which hinders the concentration of molecules of dissolved substance in the surface of solutions. V. Calculation of velocity of activated concentration of dye in the surface of benzopurpurin 10B solutions, I, 195, 415. Simple analytical derivatives of the expressions for the b.p., the f.p., and osmotic pressure of an ideal solution and of variation of latent heat with temperature, I, 257. Kinetic theory expression for the viscosity of a gas, I, 311.
- Dos Santos, R., arterial injections with stasis in infections, III, 775.
- Dostal, P. See Lehmstedt, K.
- Dostál, V., determination of chlorine in organic compounds, II, 194.
- Doster-Virtue, M. E. See Virtue, R. W.
- Dostrovsky, I., and Le Fèvre, R. J. W., dielectric polarisation data for the allegedly isomeric 4:4'-dihydroxyazobenzene of Willstätter and Benz, I, 303.
- Dothie, H. J., Llewellyn, F. J., Wardlaw, W., and Welch, A. J. E., stereochemistry of quadricovalent atoms: gold, I, 244.
- Dott, D. B., action of strychnine on Bordeaux B, II, 41.
- Doty, J. R., and Eaton, A. G., heat production and blood and urine constituents after administration of *D*-lysine monohydrochloride to the dog, III, 1076.
- See also Eaton, A. G.
- Doubilet, H., and Ivy, A. C., absorption of cholecystokinin and secretin from the colon and rectum, III, 64. Response of the smooth muscle of the gall bladder at various intravesical pressures to cholecystokinin, III, 273.
- See also Colp, R.
- Doubrou, S., histochemical study of reactions of pulmonary tissues in tuberculosis, III, 868.
- Doucet, Y., principles of cryoscopy and construction of a cryoscopic apparatus, I, 280.
- See also Darmois, E., and Murgier, (Mlle.) M.
- Doudoroff, P. See Summer, F. B.
- Dougherty, G., and Hammond, P. D., synthesis of arylsulphonium salts, II, 111.
- See also Billman, J. H., and Lee, S. W.
- Douglas, B. See Goodpasture, E. W.
- Douglas, C. G. See Courtice, F. C.
- Douglas, L. H. See Savage, J. E.
- Douglas-Saermann, A., and Maltzahn, F. von, blood-cholic and -deoxycholic acid, III, 743.
- Douglass, I. B., chemical features of Yellowstone National Park, I, 628.
- See also Johnson, T. B.
- Dounce, A. L., and Frampton, O. D., crystalline horse-liver catalase, III, 720.
- See also Sumner, J. B.
- Doupe, J., Miller, W. R., and Keller, W. K., vasomotor reactions in the hypnotic state, III, 659.
- Newman, H. W., and Wilkins, R. W., effect of peripheral vasomotor activity on systolic arterial pressure in extremities of man, III, 561. Continuous recording of systolic arterial pressure in man, III, 562.
- See also Carmichael, E. A., Newman, H. W., and Wilkins, R. W.
- Douthwaite, A. H., and Lintott, G. A. M., effect of aspirin and other substances on the stomach, III, 184.
- D'Ouille, E. L., Myers, F. J., and Connor, R., 5-sulphonylbarbituric acids, II, 522.
- Doval, J. See Spacu, G.
- Dovaz, R., mucification of vagina of pregnant guinea-pig, III, 979.
- Dow, P., and Hamilton, W. F., experimental study of velocity of pulse wave propagated through the aorta, III, 656.
- See also Hamilton, W. F.
- Dow, R. B., viscosity of liquids at high hydrostatic pressures, I, 604.
- and Matthews, E., jun., disintegration of erythrocytes and denaturation of haemoglobin by high pressure, III, 645.
- Dow, R. S., electrical activity of cerebellum and its functional significance, III, 31. Effect of lesions in the vestibular part of the cerebellum in primates, III, 246.
- and Bogaert, L. van, complex involuntary movements appearing late following resection of cerebellar hemisphere, III, 466.
- See also Bremer, F.
- Dowdell, R. L., and Green, C. H., focussing device for micrography, I, 626.
- Dowden, D. A., and Garner, W. E., heat of adsorption of gases on chromium sesquioxide at low pressures and room temperatures, I, 366.
- See also Beebe, R. A.
- Dowdeswell, R. M. See Anderson, T. F.
- Dowds, J. H., pneumococcal meningitis treated with M. & B. 693, III, 928.
- Downer, E., and Kenyon, resolution of phenylmethylcarbinol, II, 419.
- Downie, A. W., lesions produced experimentally by cowpox virus, III, 529. Immunological relationship of the virus of spontaneous cowpox to vaccinia virus, III, 879.
- Downing, A. C., Hill, A. V., and Schmitt, O. H., recording pointer-galvanometer with photo-electric coupling and thermionic amplification, for muscle heat measurement, III, 565.
- Downing, A. E., and Ellis, C. D., resonance absorption of slow neutrons, I, 4.
- Downing, J. G., analysis of claims in industrial dermatoses, III, 317. Are patch tests of real value in dermatology? III, 512. Dermatitis from *o*-dichlorobenzene, III, 783. Cutaneous eruptions among industrial workers, III, 1093.
- Downing, V. See Nowak, S. G.
- Downman, C. B. B., afferent fibres of hypoglossal nerve, III, 128, 666.
- Goggio, A. F., McSwiney, B. A., and Young, M. H. C., reflex vaso-motor responses from paws of cat, III, 746.
- Downs, W. R. See Gillespie, L. J.
- Doxiades, T., hyperemesis gravidarum and C-hypovitaminosis, III, 403.
- Doyle, W. L. See Holter, H.
- Dozzi, D. L., transient nodal rhythm following use of sulphanilamide, III, 177.

- Drabkin, D. L., [determination of] copper, I, 535. Action of urea on haemoglobin, III, 1033.
- and Singer, R. B., spectrophotometric studies. VI. Absorption spectra of non-haemolysed erythrocytes and scattering of light by suspensions of particles; spectrophotometric determination of the pH within the erythrocyte, III, 937.
- Dragstedt, C. A., Eyer, S. W., and Mead, F. B., mechanism of peptone shock, III, 182.
- Dragstedt, L. R. See Goodpasture, W. C., and Stewart, C. D.
- Drăgulescu, C. See Spacu, G.
- Dragunov, S. S., reactions of organic oxygen compounds with ammonia. I. Relative rates of reaction between ketones and liquid ammonia, I, 615.
- Drake, L. R. See Hurd, C. D.
- Drake, M. E., Renshaw, R. J. F., and Thienes, C. H., action of adrenalino substitutes on smooth muscle, III, 711.
- Renshaw, R. J. F., Thienes, C. H., and Modern, F. S., smooth muscle actions of epinephrine substitutes. VII. Responses of denervated smooth muscles of iris and intestine to epinephrine, ephedrine, amphetamine (benzedrine), and cocaine, III, 861.
- Drake, N. L., and Adams, J. R., jun., 1:4-diaryl- $\Delta^{1,2}$ -cyclopentadienes, II, 361.
- and McVey, W. C., syntheses of picene, II, 540.
- Drake, T. G., Albright, F., Bauer, Walter, and Castleman, B., chronic idiopathic hyperparathyroidism, III, 680.
- Drake, T. G. H. See Tisdall, F. F.
- Draper, G., and Dupertuis, C. W., nature of the human factor in infantile paralysis. I. Peculiarities of growth and development. II. Relation of age to maturing achievement and the disease picture, III, 443.
- Draper, R. See Ingalls, T. H., and Teel, H. M.
- Draseke, J., comparative anatomy of the wombat, *Phascolomys ursinus*, Shaw, III, 805.
- Drathschmidt, K., and Zechner, L., occurrence and distribution of arbutin in the mountain cranberry (*Vaccinium vitis idaea*, L.), III, 219.
- Drboglav, M. A., and Deviaschina, S. A., optimum conditions for formation of citric acid by *A. niger*, III, 100.
- and Frantzuzova, M. A., methods of crystallising citric acid, III, 100.
- and Kirsanova, V. A., invertase of *A. niger*, III, 100. Peroxidase activity of *A. niger*, III, 100. Amylase activity of *A. niger*, III, 100.
- Drea, W. F., spectrum analysis for trace elements in ashes of human, goat, and cow milk, III, 157.
- See also Boissevain, C. H.
- Dresen, W. C. See Flinn, R. H., and Sayers, R. R.
- Drekter, L. See Truhlar, J.
- Dreosti, A. O. See Agranat, A. L.
- Dresden, D. See Nielsen, N.
- Dresler, A., photometry, I, 339.
- Dressen, M. See Schlomka, G.
- Dressler, H. See Helferich, B.
- Dressler, M., sternal puncture in Boeck's disease, III, 3.
- Drew, C. R. See Scudder, J.
- Drew, G. C., McDougall's experiments on inheritance of acquired habits, III, 544.
- Drew, H. D. K., chemiluminescence in the oxidation of organic substances, I, 125.
- and Fairbairn, R. E., structure of the chromium lakes of dyes. I. Lakes of *oo*-dihydroxy- and *o*-hydroxy-*o*'-carboxy-azo-compounds, including monosulphonic acids; behaviour of azosalicylic acids with chromic salts, II, 309.
- and Garwood, R. F., chemiluminescent organic compounds. VII. Substituted phthalaz-1:4-diones; effect of substituents on the luminescent power, II, 345.
- Drew, R. D., and Sturtevant, J. M., use of tri-iodophenyl ethers for the identification of alkyl halides, II, 544.
- Dreys, M., toxic actions of dichlorodiethyl sulphide, III, 866.
- Dreyer, R. M., darkening of cinnabar in sunlight, I, 585.
- Dreyfus, B., and Montefiore, bone-marrow smear in *B. typhi-murium* [*Bact. aertrycke*] infection, III, 549.
- Driessens, J. See Gernez, C., and Lambert, O.
- Drigalski, W. von, cure by dietary changes, III, 492. Destruction of parenterally administered vitamin- B_1 , III, 602.
- Kunz, H., and Schläpman, K., occurrence and extent of hypovitaminosis-A, III, 850.
- Drilhon, A., and Busnel, R. G., flavin content of Malpighian tubes of insects, III, 595.
- and Florence, G., ultra-violet spectra of fish serum, III, 552.
- See also Florence, G., and Portier, J.
- Drill, V. See Kirby, G. W.
- Drill, V. A., effect of vitamin- B_1 and - B_2 complex on loss of weight produced in rats by experimental hyperthyroidism, III, 257.
- and Sherwood, C. R., effect of vitamin- B_1 and - B_2 complex on weight, food intake, and estrual cycle of hyperthyroid rats, III, 400.
- Drinker, C. K., possible systemic toxicity of chlorinated hydrocarbons: suggestions for permissible concentrations in air of workrooms, III, 780.
- See also Yoffey, J. M.
- Drips, D. G., and Osterberg, A. E., evaluation of the Frank method for determination of prolactin in urine of non-pregnant women, III, 259.
- Driver, J. R. See Cole, H. N.
- Drohocka, J. See Drohocki, Z.
- Drohocki, Z., periodic and automatic electrical activity of the cortex, III, 469. Synchronisation of electrical cortical activity, III, 469. "Electro-spectrography" of the brain, III, 469. Electro-encephalographic study of brain "automatism," III, 469.
- and Drohocka, J., electro-spectrogram of the brain, III, 469. Electro-corticogram during establishment of urethane anaesthesia, III, 469. Localisation of narcotic action by the electro-encephalogram, III, 571. Electro-cortical studies on point of action of various hypnotics, III, 669. Localisation of narcotic action by electro-encephalogram, III, 902.
- Droller, H. See Schneider, R.
- Drossbach, P., approximate thermodynamic calculations, I, 612.
- Droste, G. von, energy distribution of products of irradiation of uranium with neutrons, I, 295.
- and Reddemann, H., neutrons produced by the disintegration of the uranium nucleus, I, 398.
- See also Flüge, S.
- Drought, C. W., and Shafar, J., achlorhydic hypochromia anemia with peripheral neuritis, III, 1025.
- Droz, M. E. See Garman, R. L.
- Drozdov, N. S., meso-derivatives of acridine. IX. Chlorides of diphenylaminocarboxylic acids, and their conversion into acridones. XI. Preparation of acridone and its derivatives, and of 5-chloroacridine. XII. 5-Chloroacridine and acridol, II, 126, 282, 562. Thermal denaturation of proteins, III, 195.
- and Stavrovskaja, V. I., benzthiazole derivatives. III. 1-Aminobenzthiazole derivatives, III, 155. Attempt to prepare new antimalarial compounds, III, 928.
- See also Tschernitzov, O. M.
- Druckrey, H., action of carcinogenic substances, III, 70. Action of neoplasms on sexual functions of the rat, III, 280. Conditions of oestrogenic action, III, 586.
- Hamperl, H., Herken, H., and Rarei, B., surgical treatment of animal tumours, III, 847.
- Herken, H., and Brock, N., significance of potassium in living tissue, III, 784.
- See also Brock, N.
- Druey, J., effect of insulin on the normal organism, III, 379.
- Drummond, D. H., Gunderson, M. F., and Tollman, J. P., pathological changes produced by chlorinated lard, III, 780.
- Drummond, J. C., analysis and differentiation of composition of iron, phosphorus, and calcium compounds in respect of nutritional requirements. I. Introduction, III, 701. Physiological action of vitamin-E and consequences of -E deficiency. I. Physiological aspects, III, 1074.
- See also Guthrie, W. F. J.
- Drury, D. R., production by a new method of renal insufficiency and hypertension of the rabbit, III, 22.
- and Greeley, P. O., intravenous injection of amino-acids on glucose utilisation rate of hypophysectomised and insulin-treated rabbits, III, 296.
- See also Bergman, H., and Greeley, P. O.
- Drury, G. D., intravenous anaesthesia with special reference to pentothal sodium in Africans, III, 508.
- Drury, J. See Lewis, D. R.
- Drushinin, I. G., nature of solid solutions of the glaserite and berkeite type, I, 372.
- Drutel, H. See Meyer, André.
- Dry, T. J., usual manifestations of digitalis intoxication, III, 309.
- Dryer, H. W., effects of deoxycorticosterone acetate and cortin on salt elimination, III, 682.
- Drysdale, C. V., fundamental electrical formula, I, 63, 352.
- Dshapardize, E. S. See Tananaev, I.
- Dshlelepov, B. S., energy of hard- γ -rays, I, 442.
- D'Silva, M. See Fernando, P. B.
- Du, D. H. See Dold, H.

- Dube, G. P., electrical resistance of a metal at low temperatures and Matthiessen's rule, I, 187. Statistical theory of adsorption. II. Theory of two-layer adsorption with correlation in the first layer, I, 195.
- and Das-Gupta, H. K., London-van der Waals force between two particles in the form of discs, I, 520.
- and Levine, S., mutual interaction energy of two hydrophobic colloidal particles, I, 416. Interaction between two hydrophobic colloidal particles, using the approximate Debye-Hückel theory. I. General properties. II. Numerical computations of energy function, I, 520.
- Dubin, M., and Zaverina, E., elementary composition and sorptive properties of oxidised sugar charcoals, I, 414.
- See also Zaverina, E.
- Dubinski, A. M., and Kuznetsov, A. I., effect of drugs on gaseous exchange of striated muscle, III, 244.
- Dublin, L. I. See Marble, A.
- Dubner, H. H., and Gerard, R. W., factors controlling brain potentials in the cat, III, 670.
- Du Bois, D. See Ferguson, J. H., and Hoff, E. C.
- Du Bois, E. F. See Hardy, J. D.
- Dubois, L., Barac, G., and Lambrechts, A., colorimetric determination of bile salts in duodenal fluid, III, 148.
- Dubos, R. J., bactericidal effect of extract of a soil bacillus on Gram-positive cocci, III, 942.
- and Miller, B. F., bacterial enzyme which converts creatine into its anhydride creatinine, III, 196.
- Dubost, J., adaptation curve in man, III, 969.
- Dubost, P. See Halpern, B. N.
- Dubouloz, P. See Chevallier, A.
- Dubourg, J., and Saunier, R., velocity of crystallisation of sucrose, I, 477.
- Duboux, M., and Rochat, J., activity coefficients of concentrated solutions of hydrochloric acid with and without added chlorides or sucrose, I, 144. Relation between velocity of inversion of sucrose and hydrogen-ion activity in concentrated solutions of hydrochloric acid, pure or mixed with a chloride, I, 377.
- Dubovtzeva, L. A. See Palladina, L. I.
- Dubrauský, V., and Martzy, S., Friedman's reaction and diagnosis of ectopic gestation, III, 755.
- DuBridge, L. A., Barnes, S. W., and Buck, J. H., capture of protons by oxygen, I, 4.
- and Marshall, J., radioactive isomer of ^{87}Sr , I, 590.
- See also Barnes, S. W.
- Dubrisay, R., physicochemical study of liquid surfaces, I, 254.
- and Goupil, J. J., action of non-aqueous solutions of organic acids on metals, I, 154.
- Dubrov, S. K., X-ray investigation of silicic acid gels, I, 470.
- Dubs, W., effect of laminar and turbulent flow on the X-ray diagram of water and nitrobenzene; contribution of X-rays to the problem of turbulent flow, I, 462.
- Dubský, J. V., systematic synthesis of atomic groups in analytical chemistry. VII. Reactions and formation of salts of 1-phenyl-3-methyl-5-pyrazolone and of oximino- ψ -thiohydantoin, I, 429.
- Dubsky, J. V., and Černák, V., systematic synthesis of atomic groups in analytical chemistry. V. Reactions of the group $\text{Si}\cdot\text{C}\cdot\text{NH}\cdot\text{C}\cdot$ with specific affinity for silver, I, 430.
- and Langer, A., systematic synthesis of atomic groups in analytical chemistry. IV. Groups for the specific detection of copper, I, 157.
- and Šindelár, V., macro- and micro-reaction of iron with thioglycolic acid, I, 40.
- Šindelár, V., and Černák, V., systematic synthesis of atomic groups in analytical chemistry. III. Reactions of the silver affinity group, $\cdot\text{C}\cdot\text{NH}\cdot\text{C}\cdot$, I, 217.
- Dubuisson, M., chemical processes which occur in muscle before, during and after contraction, III, 243.
- Ducasse, J. See Quelet, R.
- Duce, W., spontaneous changes in the surface activity of haemoglobin solutions, III, 194. Combination between magnesium and proteins studied by Donnan's equilibrium, III, 195. Non-diffusible magnesium in colloidal protein sols, III, 195. E.m.f. of the frog's skin, III, 279.
- Duch, G., dynamic birefringence effect obtained during extension of a liquid film, I, 406.
- Duchanel, P. W. See Sulzer, R.
- Duchesnay, G., physiological action of vitamin-B₁, III, 601.
- Duchesne, J., and Parodi, M., structure of the tetrachloroethylene molecule, I, 596.
- See also Henri, V.
- Duckworth, J., magnesium in animal nutrition, III, 599.
- and Godden, W., determination of magnesium in biological materials; interference of manganese, III, 222.
- See also Subrahmanyam, V.
- Duclaux, J., transparency of the atmosphere. III. Calculation of former measurements, I, 596.
- See also Amat, M.
- Dudits, A., and Popják, G., effect of nucleic acid on blood formation, III, 890.
- Dudley, F. J., and Hindhaugh, W. L. S., sex ratios and comparative rearability of the sexes in cross-breeding experiments, III, 739.
- Duegan, B. S., Narang, K. S., and Ray, J. N., acridine derivatives. II, 227.
- Duggell, M., microflora of acid milks and their uses, III, 204.
- Düker, R. See Klimmig, J.
- Duensing, F., action of apotropine in the human subject and its use in chronic encephalitis, III, 180.
- Duerden, A., Heilbron, I. M., McMeeking, W., and Spring, F. S., acidic oxidation products of lupenyl esters: addition of hydrogen chloride to lupeol, II, 170.
- Durr, W. See Fricke, R.
- Dürrenmatt, K. See Kohlschütter, V.
- Duesberg, R., synthesis and catabolism of haemoglobin, III, 8.
- Dufait, R. See Massart, L.
- Dufay, J., and Bloch, M., forbidden $^3\text{P}_0 \rightarrow ^1\text{D}$, line of O III in the nebular spectrum of Nova Herculis 1934, I, 589.
- See also Cabannes, J., and Lin, T. M.
- Duff, D. A. See Marrack, J.
- Duff, D. C. B., and Holmes, R., determination of indole by dialysis, III, 1015.
- Duff, G. L., Hamilton, J. D., and Magner, D., production of arteriolonecrosis and medionecrosis of arteries by tyramine injections, III, 1032.
- Duff, P. See Alexander, W.
- Duff, V. B. See Bodansky, M.
- Duffau, R. See Lecoq, R.
- Duffendack, O. S., and Chao, K. T., temperature parameters from negative bands of nitrogen under excitation by electron impact, I, 501.
- and Koppius, O. G., variation with the density of mercury vapour of the intensity of the spectral lines of mercury excited by electron impact, I, 440.
- Slawsky, M. M., and Lifschutz, H., discharge mechanism and characteristics of Geiger-Müller counter tubes, I, 104.
- Thomson, K. B., Lee, W. C., and Koppins, O. G., quantitative spectrochemical micro-analysis of biological materials for sodium, potassium, calcium, magnesium, and lead, III, 222.
- and Wolfe, R. A., standard helium lamp for measuring intensities of spectral lines, I, 491.
- See also Lifschutz, H., and Wolfe, R. A.
- Duffieux, P. M. See Grillet, L.
- Dufour, J. See Nattan-LARRIER, L.
- Dufour, L. F., effect of glucose on muscular work, III, 716.
- Dufraisse, C., labile union of oxygen with carbon, II, 207.
- and Houpillart, J., spectrographic studies by means of corrected Hartley figures; meso-derivatives of anthracene, II, 55. Spectrographic investigation of the "active" forms of 9:10-diphenylanthracene, II, 55.
- Velluz, L., and Velluz, (Mme.) L., labile union of oxygen to carbon; a peroxide which dissociates spontaneously in the cold; spontaneous dissociation of dimethoxydiphenylanthracene photo-oxide, II, 365, 544.
- Dufrenoy, and Valatx, M., growth and differentiation of roots in sulphuretted spring waters, III, 436.
- Dugal, L. P., use of calcareous shell to buffer the product of anaerobic glycolysis in *Venus mercenaria*, III, 608.
- Duhamet, L., effect of colchicine on the growth of rootlet meristems of *Lupinus albus*, III, 1018.
- Duhem. See Lespagnol.
- Duhm, B. See Joos, G.
- Duke, J. R. C., liquid-flow regulator and its application to a constant-rate gas sampler, I, 434.
- Dukes, C. E., examination of small quantities of urine, III, 276.
- Dulan, W. J. See Hyndman, O. L.
- Dulaney, A. D., and Smith, E. F., slow lactose fermenters in water analysis, III, 629.
- Dulhunty, J. A., torbanites of New South Wales. I, I, 542.
- Dulou, R. See Dupont, G.
- Dumanois, P., Reutenauer, G., and Prettre, M., combustion of mixtures of hydrocarbons; mixtures of deca- and tetrahydronaphthalene; mixtures of decahydronaphthalene and dicyclopentadiene, I, 204, 475.
- Dumarevskaja, V. M. See Jakubson, S. I., and Plotnikov, V. A.
- Dumazert, C., sub-micro-determination of nitrogen in organic material by Kjeldahl's method, II, 132. Nature and role of combined carbohydrates of haemolymph of *Cancer pagurus*, III, 894.

- Dumazert, C., and Penet, G., nature of free blood-sugar, III, 120. Nature of combined carbohydrate in blood, III, 653. Combined carbohydrate in the blood and glycolysis, III, 926.
- and Santoni, G., composition and properties of soluble starch, II, 470.
- Du Mesnil de Rochemont, R., tables for dose determination in rotation radiation, III, 318.
- Dumke, P. See Hayman, J. M., jun.
- Dummick, F. L., and Hubbard, M. R., psychologically unique yellow, green, and blue, III, 676.
- Dumon, G. See Saric, R.
- Du Mond, J. W. M., present dilemma regarding the values of e , m , and h ; new graphical method of presentation, I, 507.
- See also Bollman, V. L., Hirsh, F. R., jun., and Kirkpatrick, H. A.
- Du Mont, H. L., and Ratzel, G., crotonaldehyde condensation; condensation with acid amides, II, 468.
- Dumoulin, E., and Charlier, R., oxygen therapy in phosgene poisoning, III, 25.
- Dun, F., and Finley, C. B., rate of adaptation of cutaneous nerve endings in frog, III, 29.
- Dunaa, J. See Cornil, L., and Olmer, D.
- Dunbar, H. F., emotions and bodily changes, III, 640.
- Dunbar, R. E., electric m.p. micro-apparatus, I, 579. Preparation and use of copper-chromium oxide catalysts for dehydrogenations, II, 6.
- Duncan, C. W., Lightfoot, C. C., and Hoffman, C. F., composition of bovine blood. I. Magnesium content of blood plasma of normal dairy calf, III, 453.
- Duncan, D., and Crocker, E. S., aberrant ganglion cells as a source of intact fibres in severed dorsal roots, III, 466.
- Dundy, H. D., Levin, L., and Markow, H., ragweed hay fever: effect of dosage in treatment of 314 cases, III, 512.
- Dunez, A. See Demolon, A.
- Dunham, E. C., Jess, R. M., and Christie, A. U., race and sex in relation to growth and development of infants, III, 544.
- Dunicz, B. L., vacuum distillation, I, 225.
- Dunis, E., differentiation of left ventricular preponderance into cardiac hypertrophy and displacement, III, 17.
- and Korth, C., left ventricular hypertrophy during amyl nitrite inhalation and anoxia, III, 360.
- Dunken, H., boundary surface solutions, I, 467.
- Dunker, M. F. W., and Thompson, M. R., toxicity and antipyretic properties of halogenated acetanilides, III, 511.
- Dunlap, G. L. See Brandly, C. A.
- Dunlap, H. See Hudspeth, E.
- Dunlop, G., and Wells, H. E., "warfa" ("swayback") in lambs in North Derbyshire and its prevention by adding copper supplements to the diet of the ewes during gestation, III, 283.
- Dunlop, H., and Laurie, pneumococcal meningitis treated with M. & B. 693, III, 928.
- Dunn, K. L., cell for dust counting, I, 391.
- Dunn, M. See Boyd, G. H.
- Dunn, M. S., and Porush, I., amino-acids and peptides. V. Function of iodine in amino-nitrogen analyses by the nitrous acid method, II, 195.
- See also Redemann, C. A.
- Dunn, R., Inoue, Kaoru, and Kirk, P. L., microscopy of the amino-acids and their compounds. IV. Picrolonates, II, 470.
- Dunn, R. B. See Eastman, N. J.
- Dunning, J. R. See Anderson, H. L., Booth, E. T., Grosse, A. V., and Whitaker, M. D.
- Dunning, J. W. See Fulmer, E. I.
- Dunning, W. J. See Bawn, C. B. H.
- Dunnington, F. G., atomic constants; revaluation and analysis of the discrepancy, I, 595.
- Dunoyer, J. M., reduction and decomposition of chromic anhydride, I, 211. Reduction of allotropic forms of manganese dioxide by hydrogen, I, 383.
- Du Noyer, R. See Bayle, E.
- Dunstan, A. E. See Birch, S. F.
- Dunton, W. F., fundamental electrical formula, I, 352.
- Dunworth, J. V., radiations from radio-manganese, I, 442. Determination of the half-value periods of radium-C' and thorium-C', with a note on time lags in a Geiger counter, I, 545.
- See also Feather, N.
- Duperier, A. See Cabrera, B.
- Dupertuis, C. W. See Draper, G.
- Dupont, G., and Darmon, (Mlle.) M., spectrographic and chemical examination of unsaturated alcohols and their dehydration products. I. β -Methylpentane- $\beta\delta$ -diol, II, 402.
- Dulou, R., and Desreux, V., spectroscopic and chemical study of aliphatic terpenes. V. Hydrocarbons derived from aliphatic alcohols, II, 136.
- and Menut, (Mlle.) M. L., spectrographic and chemical examination of unsaturated alcohols and their dehydration products. II. Mesityl oxide and alcohol derivatives, II, 402.
- and Figaniol, P., catalytic hydrogenation by finely divided metals and its mechanism, I, 207.
- Dupouy, G., rotatory magnetic dispersion of heavy benzene (C_6D_6) and heavy [ethyl] alcohol (C_2D_5OD), I, 598.
- and Feri, C., magnetic rotatory power of heavy water; dispersion and thermal variation, I, 357.
- Du Pré, P. K. See De Haas, W. J.
- Duquenois, M., semimicro-colorimetric determination of alkaloid poisons, II, 352.
- Duquenois, P., and Faller, (Mlle.), determination of organic bases and alkaloids by means of Reinecke's salt, II, 398.
- See also Volmar, Y.
- Duquesne, (Mlle.) A. See Wuyts, H.
- Duquesne, H., pulmonary infarction by injection of an inert substance and production of histamine, III, 657.
- Duran-Reynals, F., localisation of dyes and foreign proteins in normal and malignant tissues, III, 490. Spreading factor in snake venoms and its relation to their action, III, 510.
- Durand, F. See Gavaudan, P.
- Durand, J. I., Spickard, V. W., and Burgess, E., acrolynia treated with intramuscular injections of vitamin-B₁, III, 401.
- Durant, T. M., Ginsburg, I. W., and Roesler, H., electrocardiographic changes in pulmonary embolism, III, 655.
- Durban, S. A., and Brown, D. J., chromate-chromic electrode potential, I, 324.
- Durel, P. See Halpern, B. N.
- Durham, O. C. See Sylvester, C. B.
- Durieu, H., and Lequime, J., X-ray appearance of vena azygos in heart failure, III, 19.
- Durland, J. R., and Adkins, H., oxidation of methine and methylene groups [in cyclic hydrocarbons] by ozone, II, 156.
- Durnow, A., action of alkali on aryl thio-sulphates, II, 210.
- Durrell, C., and Macdonald, G. A., chlorite veins in serpentine near Kings River, California, I, 585.
- Durrell, L. W. See Deem, A. W.
- Duschinsky, R., rotatory power of citrulline; synthesis of the optically active product, II, 11.
- and Jeannerat, J., preparation of natural amino-acids from racemates by means of *d*-amino-acid oxidase, II, 302.
- Dusek, M., radiation and cardiac activity, III, 557.
- Dusi, H., pyrimidine and thiazole as growth factors for the chlorophyll-containing flagellate *Euglena pisciformis*, III, 628.
- Dusser de Barenne, J. G. See under De Barenne, J. G. D.
- Dussik, T. See Beiglbock, W.
- Dustin, C. C., Weyler, H., and Roberts, C. P., electrocardiographic changes in vitamin-B₁ deficiency, III, 401.
- See also Murphy, R. G.
- Dutcher, D., and Wintersteiner, O., Wolff-Kishner reduction of steroid ketones, II, 510.
- Dutcher, R. A. See Guerrant, N. B., and Knight, C. A.
- Duthie, E. S., origin, development, and function of blood cells in marine teleosts. I. Morphology, III, 645.
- and Chain, E., polypeptide responsible for phenomena of acute inflammation, III, 1029.
- Dutoit, P., and Yacoubyan, K. V., at. wt. of chlorine arising from industrial residues, I, 395.
- Dutt, A. T. See Chopra, R. N.
- Dutt, N. K. See Ray, P.
- Dutt, P. K. See Ghosh, B. N.
- Dutt, S., and Dass, (Miss) I. N. D., colour in relation to chemical constitution of organic and inorganic salts of oximinopyrazolones and -isooxazolones, II, 521.
- See also Gupta, M. P., and Singh, K. M. P.
- Dutta, A. K., and Deb, S. C., continuous emission spectra of the hydrogen halides and their interpretation, I, 238. Flame spectrum of HCl, I, 238.
- Dutta, H. K. See De, M. N.
- Dutton, F. B. See Booth, H. S.
- Dutton, L. O., beet pollen and beet seed dust causing hay fever and asthma, III, 92. Thrombopenic purpura due to food allergy, III, 231.
- Duval, C., and Mazars, G., detection of halogens by spot-tests, I, 95. Micro-determination of halogen ions; acid-alkalosis test, I, 275.
- See also Duval, (Mme.) R.
- Duval, (Mme.) R., and Duval, C., sodium cobaltopyrophosphate, I, 93.
- Duveen, D., and Willemart, A., synthesis of 2:6:8:12-tetraphenyl-5:11-di-*p*-diphenylnaphthacene and its photo-oxide, II, 55, 254. Photo-oxides of 9:10-dixenylantracene and 9:10-diphenyl-2-methylantracene, II, 104. 5:11-Diphenyl-6:12-diphenylnaphthacene: its photo-oxide, II, 363.
- Duveen, D. I. See Consden, R.

- Duvergé, F. J. H. See Clay, J.
- Du Vigneaud, V., and Behrens, O., carnosine and anserine, II, 187.
- Dyer, H. M., and Kies, M. W., relationship between nature of vitamin-B complex supplement and ability of homocysteine to replace methionine in the diet, III, 1069.
- Patterson, W. I., and Hunt, M., opening of the ring of the thiolactone of homocysteine, II, 37.
- Wood, J. L., and Irish, O. J., optical inversion of the benzyl derivatives of *d*-cysteine and *d*-homocysteine *in vivo*, III, 936.
- See also Hunt, M., Kies, M. W., and Wood, J. L.
- Duvoir, M., Fabre, R., and Layani, F., methyl bromide poisoning, III, 715.
- Duyckaerts, G., specific heat of iron from 1-5° to 20° K., I, 362. Specific heat of cobalt from 2° to 18° K., I, 515.
- Dvorkovitz, V., and Smiles, S., covalent alkaline derivatives of di-2-hydroxy-1-naphthyl selenide and allied substances, II, 59.
- Dwan, P. F. See Sako, W.
- Dwight, C. H., and Kersten, H., viscosity of sols made from X-irradiated apple pectin, I, 77.
- Dworacek, E., assay of adrenal cortex extracts, III, 976.
- and Festa, H., spectral analytic test of keratin, III, 1079.
- Dworzak, R., and Ballezo, H., determination of potassium with the magnesium salt of dipicrylamino; micro-determination of potassium and a separation of potassium and sodium, I, 337.
- Dwyer, C. M. See Loofbourow, J. R.
- Dwyer, F. P., reactions and salts of 4:4'-dinitrodiazoaminobenzene, II, 152. Isomerism of diazoamino-salts, II, 543. Structure of diazoamino-salts, II, 543.
- Dwyer, R. J., persistence of molecular vibration in collisions, I, 111.
- Dybing, O., Guldberg, G., and Hansen, K., pathological changes following poisoning with deuterium oxide in mice, III, 415.
- See also Hansen, K.
- Dybiewicz, K. See Urbanski, T.
- Dyckerhoff, H., and Goossens, N., mode of disturbance of blood coagulation in hemophilia, III, 10. Blood coagulation. V. Thrombokinase, III, 231.
- Goossens, N., and Schwantke, J., determination of blood coagulation time, III, 892.
- and Schörcher, F., "early poisons." I. Relationships between early poisons and components of blood clotting system, III, 550.
- Schorcher, F., and Torres, I., "early poisons." II. Preparation of a toxic substance (myotoxin) from fresh muscle tissue, III, 550.
- Dyer, C. G. See Looney, J. M.
- Dyer, E. See Barger, G.
- Dyer, H. M. See Du Vigneaud, V., and Kies, M. W.
- Dyer, W. J. See Smith, G. R.
- Dyer, W. W., pressor effect of amphetamine (benzedrine) on normal, hypotensive, and hypertensive patients, III, 505.
- Dyerle, H., prolactin and fertility in silver fox, III, 978.
- Dyke, H. B. van. See under Van Dyke, H. B.
- Dyke, S. C., and Reid, G. C. K., treatment of lobar pneumonia with M. & B. 693, III, 179.
- Dymond, E. G. See Carmichael, H.
- Dynes, J. B., report of a patient receiving large dosage of oestrogenic hormone, III, 587.
- Dyniewicz, J. M. See Steigmann, F.
- Dyrenforth, L. Y. See Taylor, H. M.
- Dysinger, G. A. See Dermer, O. C.
- Dyson, C. B., effect of fever temperature on hemolytic streptococci in the blood, III, 206.
- Dyson, J. L., Ruby Gulch gold mining district, Little Rocky Mountains, Montana, I, 499.
- Dyson, P., and Hammick, D. L., ω -trichloro- and ω -dichloro- α -picoline, II, 339.
- Dziao, S. T. See Dold, H.
- Dziemian, A. J., lipin content and permeability of erythrocytes, III, 1026.
- See also Parpart, A. K.
- Dziewonski, K., and Cholewa, E., synthesis of compounds of the 2'-phenylquinolino-4':3'-2:3-quinoline type, II, 286.
- and Chomik, T., compounds of the α -dinaphtha- γ -pyrone type, II, 276.
- and Marusínska, (Mlle.) M., 4-acetyl-1-methylnaphthalene [and derivatives], II, 23.
- Marusínska, (Mlle.) M., and Moszew, 4-arylamino-2-naphthylquinolines, II, 36.
- Stec, K., and Zagala, P., ketone derivatives of 2:6-dimethylnaphthalene, II, 24.
- Dzsinch, A., immunotherapy of gonorrhœic arthritis, III, 179.
- E.
- Eagle, A., motion of the spiral nebulae, I, 441.
- Eagle, H., spirochætidal action of the arspenamines on *Spirochaeta pallida in vitro*, III, 82. Spirochætidal action of bismuth compounds on pathogenic *Spirochaeta pallida in vitro*, III, 332. Role of molecular oxygen in antispérochætal activity of arsenic and bismuth compounds *in vitro*, III, 933. Effect of sulphhydryl compounds on the antispérochætal action of arsenic, bismuth, and mercury compounds *in vitro*, III, 934.
- Arbesman, C., and Winkenwerde, W. L., use of low-temperature ball mill for preparation of pollen extracts, III, 1113.
- Eagle, S., and Warner, J. C., kinetics of the reactions of ethyl iodide with bases in ethyl alcohol-water mixtures, I, 205.
- Eagles, G. H., and Bradley, W. H., agglutination of suspensions of virus-like particles prepared from exudates in acute rheumatic fever, III, 796.
- Eakin, R. E., and Williams, Roger J., vitamin-B₆ as a yeast nutritive, III, 921.
- Earl, J. C., and Hills, N. G., diazotisation and nitrosation of amines. I. Use of dilatometric and conductometric methods. IV. General interpretation of the reaction, I, 85; II, 414.
- Johnson, D., and McKean, J. G., 1-nitrosomenthoneoxime and its decomposition, II, 514.
- and Laurence, C. H., diazotisation and nitrosation of amines. III. Aromatic amine nitrites and their decomposition, II, 207.
- Earl, J. C., and Ralph, C. S., diazotisation and nitrosation of amines. II. Changes in pH during the reaction, II, 207.
- and Robson, A. O., colour and dyeing properties of alkyl, alkoxy-, and aryloxy-derivatives of aminoazobenzene, II, 542.
- See also Birch, A. J., and Cornforth, J. W.
- Earlam, W. T., and Morton, R. A., surface tension and absorption spectrum of female urine over menstrual cycle, III, 694.
- Earle, K. V., toxic effects of *Hippomane mancinella*, III, 190.
- Earle, W. R., Walker 256 rat mammary carcinoma *in vitro*, III, 490. Strip-shaped explants in tissue cultures, III, 740.
- and Voegtlin, C., action of methylcholanthrene on cultures of normal tissues, III, 491.
- See also Lillie, R. D.
- Easson, A. P. T. See Barger, G.
- Eastcott, E. V. See Rae, J. J.
- Eastlick, H. L., rôle of heredity versus environment in limb bud transplants between different breeds of fowl, III, 443.
- Eastman, N. J., Dunn, R. B., and Kreiselman, J., relative value of pure oxygen and carbon dioxide mixtures in experimental resuscitation, III, 462.
- Eaton, A. G., basal metabolic rate of normal individuals in New Orleans, III, 1076.
- and Doty, J. R., heat production and blood and urine constituents after administration of *D*-arginine monohydrochloride to the dog, III, 1076.
- See also Doty, J. R.
- Eaton, L. M., Camp, J. D., and Love, J. C., symmetric cerebral calcification, particularly of the basal ganglia, demonstrable roentgenographically: calcification of the finer cerebral blood vessels, III, 668.
- and Haines, S. F., symmetrical cerebral calcification associated with parathyroid insufficiency, III, 573.
- Eaton, M. D., soluble malarial antigen in serum of monkeys infected with *Plasmodium knowlesi*, III, 792.
- and Coggeshall, L. T., complement fixation in human malaria with an antigen prepared from the monkey parasite *Plasmodium knowlesi*, III, 628.
- Eaton, O. N., weights and measurements of mature inbred and crossbred guinea-pigs, III, 737.
- Eau & Assainissement, Anciens Établissements C. Gibault. See under Soc. Eau & Assainissement, Anc. Établ. C. Gibault.
- Ebbecke, U., relation of erythrocytes and spherocytes to hemolysis and sedimentation rate, III, 116. Contractility and double refraction in rubber and muscle, III, 662. Origin and significance of striation in muscle as demonstrated on vulcanised rubber, III, 747.
- Ebel, R. L., atomic structure and the periodic table, I, 169.
- Ebeling, A. H. See Baker, L. E.
- Ebert, R. H., and Florey, H. W., extravascular development of monocytic III, 1027.
- Florey, H. W., and Pullinger, B. D., modification of a Sandison-Clark chamber for observation of transparent tissue in the rabbit's ear, III, 343.

- Ebertz, E. G., and Lobitz, C., induced localisation of streptococci through calcium gluconate injections, III, 1089.
- and Lobitz, W. C., jun., ragweed pollen: artefact in tissue sections, III, 867.
- Ebihara, T., ascorbic acid oxidase. I. Distribution in plants. II. Purification and properties. III. Peroxidase in purified preparations, III, 321, 720. See also Fujita, A.
- Ebster, H., action of mistletoe on the electrocardiogram of the frog, III, 506.
- Eby, L. T. See Campbell, K. N.
- Eccles, J. C., anti-choline-esterases and rate of decay of synaptic transmitter in superior cervical ganglion, III, 253.
- and O'Connor, W. J., responses evoked by nerve volley in mammalian striated muscle, III, 127. Action potentials evoked by indirect stimulation of curarised muscle, III, 127. Excitatory and inhibitory actions at neuromuscular junction, III, 566. Action of eserine on striated muscle, III, 566.
- Échevin, R., and Brunel, A., utilisation of glyoxylic ureides by *Soja*, III, 635. See also Brunel, A., and Molliard, M.
- Echols, L. S., and Pease, R. N., kinetics of the decomposition of *n*-butane. I. Normal decomposition. II. Inhibition by nitric oxide and propylene, I, 149, 376.
- Eck, H., investigations on saturation state of water from 350° to the critical temperature, I, 134.
- Eck, J. C., and Thomas, B. H., chemical activation of sterols. V. Relationship between chemical activation and configuration of various sterols and derivatives. VI. Reagents in chemical activation and in sterol colour reactions, II, 260.
- and Van Peursem, R. L., dehydration of cholesterol, II, 539.
- Van Peursem, R. L., and Hollingsworth, E. W., preparation of Δ^3 - and Δ^4 -cholestadienes; cholesterileno and "7-dehydrocholestene isomeric," II, 105.
- Eckardt, R. E., and Johnson, L. V., nutritional cataract and relation of galactose to appearance of the senile suture line in rats, III, 752.
- Ecke, W., hypochloræmia produced by posterior pituitary extract, III, 576.
- Eckel, E. B., gas bubbles as nuclei for "oolites," I, 287. Brown iron ores of Eastern Texas, I, 343.
- Ecker, A. D., hyaline change in the basophil cells of the pituitary not associated with basophilism, III, 46. Anatomic associations of pituitary basophilism, III, 676.
- Ecker, A. J., arsenical content of the brain in cases of encephalitis, inflammatory occlusion of the aqueduct, and acrodynia, III, 573.
- Ecker, E. E., and Pillemer, L., dehydration and preservation of complement and other biological materials, III, 634.
- Pillemer, L., Griffiths, J. J., and Schwartz, W. P., complement and ascorbic acid in human scurvy, III, 851. See also Pillemer, L., and Wertheimer, D.
- Eckermann, H. von, "baddelyite from Alnö"—an error, I, 585.
- Eckstrom, S., myxœdema with myotonic reflex of tendon Achilles, III, 573.
- Eckey, P., use of strophanthin for heart failure, III, 613.
- and Vorwerk, W., influence of strophanthin on circulation after carotid sinus denervation, III, 310.
- Eckhart, K. M. See Shadle, A. R.
- Eckler, C. R., and Shonle, H. A., thioarsene, disodium bis-(*p*-sulphenyl)acetamidophenyl dithioarsenite, III, 1003.
- Eckman, M. See Barach, A. L.
- Eckstein, H. C. See Treadwell, C. R., and Tucker, H. P.
- Eckstein, H. P., distribution of fluorescence excitation of bivalent europium in calcium fluoride and of bivalent samarium in calcium sulphate, I, 451.
- Eddington, (Sir) A. S., "failure" of quantum theory at short ranges and high energies, I, 237.
- Eddy, C. W. See De Eds, F., and Thomas, J. O.
- Eddy, H. M. See Myers, V. C.
- Eddy, N. B., carbazole derivatives. I. Aminocarbazoles. II. Aminoalcohols, and derivatives of tetrahydrocarbazole, II, 227; III, 507. Morphine, codeine, and derivatives. XIV. Variation with age in toxic effects of morphine, codeine, and derivatives, III, 778. Search for more effective morphine-like alkaloids, III, 863.
- Edel, V., chronic experimental rickets, III, 923. See also Mouriquand, G.
- Edelken, J., and Rose, E., relief of anginoid pain following removal of intrathoracic non-toxic nodular goitre, III, 257.
- Edelman, G. G. See Shigatsch, K. F.
- Edelmann, H., profile analysis, III, 544.
- Edens, E., circulation in mitral disease, III, 656.
- Eder, H., Bradley, H. C., and Belfer, S., survival of cathepsin in autolysis, III, 722.
- Eder, H. L., acidosis during prelacteal period: prevention by dextrimaltose containing sodium citrate, III, 283.
- Eder, K. See Dane, (Frl.) E.
- Eder, R., and Siegfried, B., natural hydroxy- and hydroxy-methyl-anthraquinones and synthesis of anthraquinone derivatives, II, 271.
- Edgar, C. E., El Sadr, M. M., and Macrae, T. F., water-soluble B-vitamins. XI. Determination of yeast-eluante factor and yeast-filtrate factor by rat growth methods. XII. Preparation from liver of factors containing the same dietary essentials as yeast-eluante and -filtrate fractions, III, 166.
- Edgren, G., ætiology of chorea minor, III, 33.
- Edhem, Erden, F., and Steinitz, K., case of essential fructosuria, III, 501.
- Edbacher, S., Baur, H., and Kobner, G., properties of arginase and histidase, III, 786.
- Edlén, B., and Tyrén, F., atomic energy states of an unusual type, I, 439. See also Bowen, I. S., and Swings, P.
- Edmunds, C. W., potency of digitalis preparations, III, 1086.
- Edmunds, J. G. See Owen, E. A.
- Edmundson, R. S., barite deposits of Virginia, I, 287.
- Edridge-Green, F., after-image phenomena, III, 376.
- Edsall, J. T., Greenstein, J. P., and Mehl, J. W., denaturation of myosin, III, 869. See also Crawford, B. L., jun., and Otvos, J. W.
- Edstrom, G., gastric secretion and basal metabolic rate (B.M.R.) in chronic rheumatoid arthritis, III, 689.
- Edward, D. G. See Court, D.
- Edwards, A. B., tertiary volcanic rocks of central Victoria, I, 108.
- Edwards, D. G. ff., Gordon's encephalitic agent, III, 3.
- Edwards, D. J., and Wilson, M. G., vital capacity standards, III, 365.
- Edwards, E. A., chronic organic arterial disease, III, 897.
- Edwards, H. I., and Newton, W., physiology of *Rhizoclonia solani*, Kuhn. V. Activity of enzymes, III, 102.
- Edwards, H. L. See Dobbins, J. T.
- Edwards, H. T., simplified determination of lactate in normal human blood, III, 13.
- Brouha, L., and Johnson, R. E., blood-lactate in normal and sympathectomised dogs, III, 301.
- Edwards, J. C., and Veer, J. B. V., evaluation of precordial electrocardiograms, III, 17.
- Edwards, L. D., pharmacology of soaps, III, 716.
- Edwards, L. F., and Kitchin, P. C., does resection of the nerves supplying the mandible affect tooth development? III, 36. See also Berman, M.
- Edwards, P. R., and Bruner, D. W., biochemical and serological varieties of *Salmonella typhi-murium*, III, 431.
- Edwards, R. A., Shimkin, M. B., and Shaver, J. S., hypertrophy of the breast due to injections of adrenal cortex extract in a man with Addison's disease, III, 44.
- Edwards, T. I. See Flinn, R. H.
- Eekelen, M. van, Pannevis, W., and Engel, C., absorption of carotenoids from the human intestine, III, 284.
- Efikemann, G., role of the pituitary in the origin of human diabetes mellitus. II. Effect of increased fat- and carbohydrate-metabolism hormones on the saturated and unsaturated fatty acids of the liver, III, 300. See also Herold, L.
- Efimov, M. I., restoration of regeneration in metazoan systems which have lost this ability, III, 543.
- Efremenko, T. I., electro-capillary method [of analysis], I, 493.
- Efremov, N. E., classification of the minerals of the serpentine group, I, 497.
- Efron, B. G., and Dorfman, R. I., use of comparative skin reaction curves in determination of skin-reacting potency of house dust extracts, III, 1091.
- Efros, L. S. See Joffe, J. S.
- Eftimie, O. See Mante, D.
- Egami, F., utilisation of methyl alcohol in white mice at thermal neutrality, III, 409. See also Soda, T.
- Egan, E. P., jun. See Tarbutton, G.
- Eger, W., and Morgenstern, V., glycogen formation in "white" and "brown" fatty tissue, III, 407. See also Felix, K.
- Egerton, A. C. See Harris, E. J.
- Eggenberger, H. See Kohlschütter, F.
- Eggers, H., two-component system iron-rhenium, I, 18.
- and Peter, W., equilibrium diagram iron-niobium, I, 18. Iron corner of the equilibrium diagram iron-niobium-carbon below 1050°, I, 19.

- Eggers, V. See Link, G. K. K.
- Eggert, J., and Schopper, E., graininess of photographic layers on irradiation with high-energy quanta, I, 89.
- Eggertsen, F. T. See Kolthoff, I. M.
- Eggleton, P., and Robson, J. M., gonadotrophin from horse pituitaries, III, 905.
- Eggleton, W. G. E., zinc content of epidermal structures, III, 488. Zinc content of epidermal structures in beri-beri, III, 602.
- Egidius, T. F., mercurous salts and their amido-compounds, III, I, 99.
- Egle, K. See Seybold, A.
- Egorova, M. E. See Nikitin, B. K.
- Egoveille, J. W., metastatic calcification in a case of carcinoma of the breast, III, 158.
- Ehlers, J., growth of crystals from the vapour phase, I, 456.
- Ehlert, H., bactericidal power of vetren [heparin], III, 815.
- Ehmert, A., hard showers in cosmic ultra-radiation and the second maximum of the Rossi curve, I, 506.
- See also Regener, E.
- Ehrenberg, W. See Trömel, G.
- Ehrenfeld, I., Brown, A., and Sturtevant, M., allergy in the pathogenesis of peptic ulcer, III, 914.
- Ehrenfest, P., jun., and Fréon, A., spontaneous disintegration of "mesotrons," particles composing the penetrating cosmic rays, I, 55.
- See also Auger, P.
- Ehrenfest-Afanassjewa, T., quasi-statistical and non-statistical changes of state, I, 363. Reversible and non-reversible processes, I, 363.
- Ehrenkranz, (Miss) F., spark breakdown potentials as a function of the product of the pressure by the plate separation in argon, nitrogen, and hydrogen for platinum and sodium cathodes, I, 168.
- Ehrenstein, M., steroids. I. 6-Ketoprogesterone and the stereochemical configuration of several 3:5:6-triols, II, 554.
- Ehrensward, G., and Sillén, L. G., so-called "oil potentials," I, 421.
- See also Karschulin, M.
- Ehret, W. F. See Straten, F. W. van.
- Ehrhardt, K., pregnancy reaction in case of hæmatomole, III, 687. Fœtal intra-uterine respiratory movements, III, 746.
- and Funke, R., action of corpus luteum hormone on the anterior pituitary, III, 58.
- and Koenig, Werner, action of hormones and vitamins in pregnant rodents, III, 686.
- Kramann, H., and Schäfer, H., clinical experiences with oestrogenous stilbene preparations, III, 383.
- Ehrhardt, W., and Gueffroy, W., danger to health in using grinding and cooling oil, III, 1093.
- Ehrhart, G., Ruschig, H., and Aumüller, W., new syntheses in the sterol series, II, 327.
- Ruschig, H., and Rigler, R., cortenil, a synthetic adrenal cortex hormone, III, 580.
- Ehrhorn, H. See Biltz, W.
- Ehrismann, O., metabolism during work under different climatic conditions, III, 294.
- and Hasse, A., permissible period of work at high temperature and atmospheric humidity, III, 193. Permissible working time at high temperature and humidity, III, 620.
- Ehrlich, P., phase relations and magnetic behaviour in the system titanium-oxygen, I, 411.
- Ehrstrom, C. C., irreversible allergic reactions with non-bacterial antigen, III, 418. Chondroitinsulphuric acid, heparin, albuminuria, amyloid, and serum-protein, III, 1028.
- Eichelberger, J. F. See Green, J. B.
- Eichelberger, L., distribution of body water in skeletal muscle in dogs with impaired renal function, III, 663.
- Eichenberger, W., phenomena of a second type of radioactivity observed by Reboul, I, 231.
- Eichholtz, F., antiphlogistic effects, III, 188. Pharmacology, III, 1006.
- Eichler, O., coffee and caffeine, III, 185.
- and Speda, G., fall of plasma-histamine by hyperventilation, III, 311.
- Eichler, W., veratrine contracture and rhythmicity of end-plates, III, 126. Is the motor end-plate separated from the spinal nerve by a synapse? III, 126.
- Eichman, R. K., Lukashevitch, V. O., and Silaeva, E. A., preparation of nitro- and amino-derivatives of carbazole, II, 227.
- Eichwald, E. See Hoog, H.
- Eicke, H., tests of the validity of Beer's law for copper salt solutions, using the alkali-metal photo-cell, I, 193.
- Eickhoff, W., Sunder-Plassmann, P., and Stecher, W., relation of anaphylactic shock to thyroid function, III, 256.
- Eidinoff, M. L. See Aston, J. G.
- Eidus, J. T., chemical action of high-frequency corona discharge on ethyl alcohol vapour, I, 378. Action of high-frequency coronary discharge on ethylene, II, 197.
- Eigenberger, E., density determination in small amounts of liquid with the micro-buoyancy balance, I, 281. Micro-combustion analysis of very volatile liquids, II, 193.
- Eigler, G., salivary amylase before and after tonsillectomy, III, 914.
- Eijk, M. van, influence of salt intake on root respiration of *Aster tripolium*, III, 534.
- Eijkman, C. See Sizoo, G. J.
- Eilender, W. See Esser, H.
- Eimas, A., methyl salicylate poisoning in an infant; report of a case with partial necropsy, III, 92.
- Eimer, F. See Fischbeck, K.
- Einerson, L., and Ringsted, A., effect of chronic vitamin-E deficiency on the nervous system and skeletal musculature, III, 77.
- Einicke, E., general and inorganic chemistry of deuterium. I.—IV., I, 36.
- Einhauser, M., treatment of severe burns with adrenal cortex and vitamin-C, III, 580. Toxic action of hypnotics and adrenal cortex, III, 862.
- Einhorn, N. H., the pineal gland, III, 683.
- and Rowntree, L. G., experimental phases of the pineal problem, III, 583.
- See also Rowntree, L. G.
- Einsel, I. H. See Quigley, J. P.
- Eirich, F., physico-chemical characterisation of pathological serum-proteins, III, 195.
- and Simha, R., theory of viscous flow reactions for chain-like molecular substances, I, 192.
- See also Albert, O.
- Eisele, C. W., alkalosis in peptic ulcer therapy, III, 841.
- Eiseman, J. H. See Smith, F. A.
- Eisenberg, F., specific bactericidal activity. XVIII. Theory of specific bactericidal action. XIX. Supplement and literature, III, 336.
- Eisenberg, G. M., Nile-blue culture medium for lipolytic micro-organisms, III, 729.
- Eisenberg, H. See Thorn, G. W.
- Eisenberg, M. J., surface enamel of human teeth, III, 223.
- Eisenbrandt, J., and Ficher, H., polarographic determination of biologically important ketones of the sterol group, III, 886.
- Eisenbud, L. See Breit, G.
- Eisenhuth, F. See Lehmann, E.
- Eisenschitz, R., specific heat of β -brass, I, 133.
- Eisenstaedt, E., condensation of amino-antipyrine with aromatic amines in the presence of oxidising agents, II, 37.
- Eisleb, O., and Schaumann, O., dolatin, a new analgesic and spasmolytic substance, III, 776.
- Eisler, A. B., functional hyperplasia of the parathyroids in experimental anæmias, III, 256.
- Eisner, E., and Roback, H. N., cerebral dysgenesis (agenesis), III, 1037.
- Eistert, B., mesomerism of indigotin, II, 285. Conception of mesomerism in organic chemistry, II, 295.
- See also Arndt, F.
- Eisurovitch, A. S., photo-electric method of sedimentation analysis, I, 159.
- Eitel, H., antithyrotropic activity of blood in health and disease, III, 47.
- Eitel, M. See Linneweh, F.
- Eitel, W., Müller, H. O., and Radzewski, O. E., electron optical examination of clay minerals, I, 438.
- Eitington, M. See Niederl, J. B.
- Eker, R., effect of temperature on manifestation of the short-wing gene in *Drosophila melanogaster*, III, 957.
- Ekert, F. See Boehm, G.
- Ekhlas, M. See Desai, R. D.
- Eklund, C. M., and Blumstein, A., relation of human encephalitis to encephalomyelitis in horses, III, 335.
- Ekstein, G. See Goldmann, F.
- Ekstein, H., colour of artificial crystals of rock-salt, I, 287. Ultramicroscopy in optically anisotropic crystals, I, 368.
- Ekstein, J., influence of temperature on elasticity and on the rupture of crystals, I, 308.
- Ekwall, P., constitution of solutions of alkali salts of long-chain fatty acids, I, 258.
- Elam, J. E., nitrous oxide in midwifery, III, 87.
- Elbe, G. von, and Lewis, Bernard, kinetics of the non-explosive and explosive reaction between hydrogen and oxygen sensitised by nitrogen peroxide. II., I, 477. Mechanism of complex reactions and association of H and O₂, I, 568.
- See also Lewis, Bernard.
- Elberg, V. A., autonomic nervous system in circulatory disturbances. II., III, 456.
- Elchardus, E. See Laffitte, P.
- Eldahl, A., acute porphyria developed during hospitalisation, III, 407. Symptomatology of acute porphyria and classification of porphyrias, III, 487. Porphyrins and clinical methods for their demonstration [in urine], III, 487.

- Elder, J. H., effects of theelin injections in normal prepubescent chimpanzees, III, 585.
- Elderfield, R. C. See Bloch, E., Finkelstein, J., Jacobs, W. A., and MacPhillamy, H. B.
- Elek, A., micro-determination of alkoxyl groups, II, 235.
- Elenbaas, W., continuous spectrum of mercury arc, I, 228.
- Elenevitch, L. P. See Finkelschtein, D. N.
- Eley, D. D., solubility of gases. I. Inert gases in water, I, 607.
- Elford, W. J. See Scott, T. F. M.
- Elftman, H., forces and energy changes in the leg during walking, III, 781. Function of muscles in locomotion, III, 781.
- Elhardt, E. See Fischer, Hans.
- Eliot, C. G. See Allen, C. F. H.
- Eljaschkevitch, E. S. See Goldstein, B.
- Elkan, E. R., *Xenopus* pregnancy test, III, 143.
- Elkenbard, A. G., Genkina, R. I., and Poljakov, M. V., mechanism of formation of oxides of nitrogen in explosion of inflammable mixtures, I, 569.
- Elkes, J., Frazer, A. C., and Stewart, H. C., composition of particles seen in normal human blood under dark-ground illumination, III, 357.
- Elkins, H. B., and Levine, L., decomposition of halogenated hydrocarbon vapours by smoking, III, 779.
- Ellegood, J. A., phytochemistry of *Iridaea laminarioides*, III, 800.
- Ellenbeek, H. D., surface tension in kidney disease, III, 391.
- Ellenberg, M. See Adlersberg, D.
- Ellerbrook, L. See Gettler, A. O.
- Ellert, H. See Hrynakowski, K.
- Ellert, M. See Volmar, Y.
- Ellett, A. See Van Allen, J. A.
- Ellinger, G. F. See Goldsmith, G. A.
- Ellinger, R. See Widenbauer, F.
- Elliot, A. H., Ussher, N. T., and Stone, C. S., bilateral carotid sinus denervation in man, III, 560.
- Elliot, L. See Euler, H. von.
- Elliott, S. See Euler, H. von.
- Elliott, A., band spectrum attributed to NBr, I, 298.
- See also Cameron, W. H. B.
- Elliott, D. F., and Kon, G. A. R., saponins. VI. Quillaic acid, II, 436.
- Elliott, F. H. See Elliott, K. A. C.
- Elliott, G. A., Macfarlane, R. G., and Vaughan, J. M., stored blood for transfusion, III, 353.
- See also Campbell, M.
- Elliott, K. A. C., and Elliott, F. H., influence of some intermediary metabolites and salts on respiration of liver tissue suspensions, III, 408.
- See also Greig, M. E.
- Elliott, M. See Silver, B.
- Elliott, M. A. [with Fuoss, R. M.], conductance of salts in tricresyl phosphate at 40°, I, 201.
- and Williams, John Warren, dielectric behaviour of solutions of the protein zein, I, 259.
- Elliott, R. L. See Hodgson, H. H.
- Elliott, R. M., and Wulff, J., hyperfine structure of gold, I, 166.
- Ellis, A. G. See Jamum, A.
- Ellis, B., and Petrow, V. A., steroids and related compounds. IV. Stereochemical configuration of the cholestane-3:5:6-triols, I, 421.
- Ellis, C. D. See Downing, A. E.
- Ellis, D. M. See Osgood, E. E.
- Ellis, E. L., and Delbrück, M., growth of bacteriophage, III, 432.
- Ellis, F. W., Henry Pickering Bowditch and the development of the Harvard Laboratory of Physiology, III, 393.
- Ellis, G. R., treatment of subacute bacterial endocarditis with M. & B. 693, III, 305.
- Ellis, J. W., and Bath, (Miss) J., modifications in the near infra-red absorption spectra of protein and of light and heavy water molecules when water is bound to gelatin, I, 7. Infra-red pleochroism and Fermi resonance associated with CH₃ groups in crystals, I, 402.
- and Kinsey, E. L., vibrational-rotational radiation transitions in water molecules in non-polar solvents, I, 7.
- Ellis, L. B., and Faulkner, J. M., circulatory effects of intravenous glucose and sucrose injections, III, 823. Heart in anaemia, III, 895.
- Ellis, N. R. See Byerly, T. C., and Riemenschneider, R. W.
- Ellis, S. J., total heat-entropy diagram for diphenyl, I, 67.
- Ellison, E. T. See Phelps, D.
- Ellison, H., and Hey, D. H., action of benzaldehyde on *o*-, *m*-, and *p*-xylenes in presence of aluminium chloride, II, 14.
- Ells, V. R., and Noyes, W. A., jun., photochemical studies. XXIX. Decomposition of diethyl ketone at short wavelengths; comparison of acetone, methyl ethyl ketone, and diethyl ketone near 3000 Å., I, 574.
- Elman, R., time factor in retention of nitrogen after intravenous injection of a mixture of amino-acids, III, 997.
- and Weiner, D. O., intravenous alimentation, III, 553.
- See also Schwartz, H. G.
- Elmby, A., and Christensen, P. B., ascorbic acid during pregnancy, confinement, and puerperium, III, 167.
- See also Jersild, T., and Lund, H.
- Elmer, A. W., iodine metabolism and thyroid function, III, 376.
- Giedosz, B., and Scheps, M., effect of vitamin-B₂ on experimental hyperthyroidism, III, 165. Effect of oestrone and testosterone on experimental hyperthyroidism, III, 475. Difluorotyrosine in experimental hyperthyroidism, III, 475.
- Krasowska, M., and Ptaszek, L., sucrosuria; rare metabolic error, III, 1077.
- Elmore, W. C., magnetisation of ferromagnetic colloids, I, 141.
- Elo, H. See Kauko, Y.
- Elomaa, E. See Nyman, G. A.
- Elowitz, S. I., and Rosing, V. S., formation of an active palladium surface during the oxygen-hydrogen reaction, I, 152.
- Elphinstone, J. J., and Ward, E. M., sp. gr. of blood in pneumonia, III, 648.
- El-Sadr, M. M., Macrae, T. F., and Work, C. E., water-soluble B-vitamins. XIII. Alloxazine-adenine dinucleotide, adenylic acid, nicotinamide, and pimelic acid in the nutrition of the rat. XIV. Yeast-eluante factor of the vitamin-B₆ complex, III, 603.
- See also Edgar, C. E., and Macrae, T. F.
- Elsasser, F. See Anton, H.
- Elsasser, T. H., and Wallace, G. B., selective action of urine and serum, from patients with malignant tumours, on embryonal and newly growing tissues, III, 700.
- Elsasser, W. M., far infra-red absorption of atmospheric water vapour, I, 59. Atmospheric absorption caused by the rotational water band, I, 239.
- Elsberg, C. A., and Spotnitz, H., neural components of light and dark adaptation and their significance for the duration of the foveal dark-adaptation process, III, 37. Relation between area and intensity of light and the size of the pupil, with formulas for pupillary reactions, III, 37.
- and Stewart, Jane, quantitative olfactory tests: value in localisation and diagnosis of tumours of the brain, with analysis of results in three hundred patients, III, 246.
- Elsdon-Dew, R., blood groups in Africa, III, 960.
- Elsner, H., Liedmann, A., and Oppers, K., action of anticoagulant substance from red alga *Delesseria sanguinea* (L.), Lam., III, 960.
- Elsom, K. A., and Glenn, P. M., pressor response to tyramine, III, 307.
- Eltenton, G. C., checking pumping speeds, I, 105. Siphon head for Dewar flasks, I, 161. Simple and variable greaseless leak, I, 161. Mercury poisoning, III, 509.
- Elvegård, E. See Lindroth, S.
- Elvehjem, C. A., milk in nutrition, III, 160. Biological methods for [assay of] vitamin-B complexes, III, 165.
- See also Arnold, A., Axelrod, A. E., Bird, H. R., Clifton, L. E., Frost, D. V., Hegsted, D. M., Hove, E., Kohler, G. O., McKibbin, J. M., Mickelsen, O., Potter, V. R., Stirn, F. E., Strong, F. M., Wiese, A. C., and Woolley, D. W.
- Elvidge, A. R., and Reed, G. E., biopsy studies of cerebral pathologic changes in schizophrenia and manic-depressive psychosis, III, 248.
- Elvove, E. See Rosenthal, S. M.
- Elwert, G., rigorous calculation of intensity and polarisation in continuous Röntgen spectra, I, 113.
- Ely, E. C. See Smith, S. B.
- Embleton, D., dietetic treatment of diabetes mellitus with special reference to high blood pressure, III, 50.
- Embre, N. D., occurrence of cyclised vitamin-A in fish-liver oils, III, 601.
- Emeleus, H. J., and Gardner, E. R., oxidation of monogermene and digermene, I, 30.
- and Miller, N., new derivatives of the silyl radical, II, 53. Derivatives of monosilane. I. Reactions of chlorosilane with aliphatic amines, II, 304.
- and Reid, C., pyrolysis of disilane and trisilane, I, 422.
- See also Maddock, A. G., and Roberts, E. R.
- Emerique-Blum, L. See Javillier, M.
- Emerson, G. A., action of inhalation anaesthetics on dehydrogenases, III, 186.
- See also Andes, J. E., Emerson, O. H., and Evans, H. M.
- Emerson, K., jun., and Cutting, W. C., urinary thyrotropic hormone, III, 48.
- See also Thorn, G. W.
- Emerson, L. See Munday, B.

- Emerson, O. H., Emerson, G. A., and Evans, H. M., occurrence of γ -tocopherol in maize embryo oil, III, 497.
- Emerson, R., and Green, L., effect of pH on *Chlorella* photosynthesis, III, 211.
- Emerson, W. S. See Fuson, R. C.
- Emery, B. S., progress in gastroenterology in 1936 and 1937, III, 483.
- See also Rutherford, R. B., and Warren, H. A.
- Emery, F. E., and Sehwahe, E. L., increased sensitivity of the vagina to theelin, in the chronic castrated rat, induced by the cotton swab procedure, III, 585.
- See also Griffith, F. R., jun., and Schwabe, E. L.
- Emge, L. A. See Murphy, K. W.
- Emmanuel-Zavizziano, (Mme.) H., action of heat on concentrated solutions of titanium and of zirconium in hydrochloric acid, I, 417.
- Emmel, V. M., Golgi apparatus in the tubule cells of the perfused frog's kidney, III, 150.
- See also Rakestraw, N. W.
- Emmens, C. W., oral activity of androgens, oestrogens, and augmenting substances, III, 264. Effect of prolonged dosage with oestrogens on adult Brown Leghorn cock, III, 583. Variations in response of ovariectomized mice to oestrone, III, 685.
- See also Callow, N. H.
- Emmerie, A., separation of lactoflavin (vitamin-B₂) and lactoflavin phosphate, II, 229. Urinary flavin excretion, III, 287.
- and Engel, C., colorimetric determination of α -tocopherol (vitamin-E). I.—III. Blood-serum, II, 123, 236; III, 923. Colorimetric determination of *dl*- α -tocopherol (vitamin-E), II, 134. Chemical structure and properties of tocopherol (vitamin-E). IV. Chemical tests for the tocopherols, III, 1074.
- and Wolff, L. K., micro-determination of carotene in human serum, III, 121.
- Emmert, B., and Asendorf, E., synthesis of 2-pyridindialkylcarbinols, II, 387.
- Emmett, A. D. See Thayer, S. A.
- Emmons, C. W. See Hollaender, A.
- Emmons, R. C., and Fries, C., aluminium and silicosis, III, 193.
- Emmrich, J. P., prophylactic intravenous injection of posterior pituitary extracts post partum, III, 475.
- Emodi, G. See Balassa, G.
- Emschwiller, G., production of iodic anhydride by photo-oxidation of organic iodides; photo-oxidation of solid iodoform and carbon tetraiodide, I, 153. Formation of iodic anhydride by photo-oxidation of organic iodides. I. Photo-oxidation of methylene iodide. II. Generality of the phenomenon; photo-oxidation of solid iodoform and carbon tetraiodide, I, 272.
- and Charlot, G., solubility of calcium carbonate in solutions of ammonium salts, I, 413. Qualitative mineral analysis, I, 487.
- Emster, K. van. See Meerwein, H.
- Emte, W. See John, W.
- Enami, M. S., role of hypophyseal secretion in colour change in cat-fish, III, 972.
- Endermann, F., and Fischer, Hans, imidoporphyrins. V. New synthesis of monoimidoporphyrins and further modes of formation of di- and tetra-imidoporphyrins, II, 288.
- Enders, C., and Hegendörfer, M., growth-substance content of yeasts, III, 326.
- and Röed, K., protein of *Pediococcus* of beer, III, 793.
- and Theis, K., melanoidins and their relation to humic acids, II, 81.
- Enders, R. K., ovum of the mink (*Mustela vison*), III, 442.
- Endicott, M. M. See Johnson, T. B.
- Endo, M., skin derivatives in the axilla of Japanese children, III, 347. Volume of testicular parenchyma in Japanese children, III, 441. Apocrine sweat glands in axilla of Japanese children, III, 805.
- and Mori, Y., topography of the larger branches of the abdominal aorta of Japanese embryos, III, 224.
- Endres, G., Hüttel, R., and Kaufmann, L., leaf pigments, III, 537.
- Enescu, J., and Vacareanu, V., disturbance of cardiac rhythm by atropine, III, 613.
- Engard, C. J. See Clements, H. F.
- Engel, C., proteinase of gastric juice of *Homarus vulgaris*, III, 63. Decomposition of diazo-derivatives [of sulph-anilamide] in physiological media, III, 178.
- See also Eekelen, M. van, Emmerie, A., Tomaszewski, W., and Weel, P. B. van.
- Engel, D., dysostosis multiplex: Pfaundler-Hurler syndrome, report of two cases, III, 1021.
- Engel, F. L., and Gurvitsch, A., mitogenetic phenomena in unimolecular films, III, 194.
- Engel, H., and Roberg, M., excretion of nitrogen by root nodules, III, 212.
- Engel, L. L. See Thorn, G. W.
- Engel, M., determination of bilirubin in whole blood and in plasma and serum containing haemoglobin, III, 813. Quantitative determination of bilirubin in whole blood, III, 1029.
- See also Abramson, H. A., and Deutsch, B.
- Engel, P., cock's comb assay of male hormone, III, 590. Assay of pineal extracts, III, 908.
- and Morales, C. E., Friedman reaction in infantile female rabbits, III, 1055.
- Engel, R., treatment of Cushing's syndrome, III, 260. Sprue and vitamin-K deficiency, III, 292.
- See also Billmann, F.
- Engel, R. W., and Phillips, P. H., lack of nerve degeneration in uncomplicated vitamin-B₂ deficiency in the chick and rat, III, 401. Effect of riboflavin-low diets on nerves, growth, and reproduction in the rat, III, 1070.
- See also Phillips, P. H.
- Engel, S., and News, G. H., musculature of lung in children, III, 968.
- Engel, Werner. See Hess, K.
- Engeland, R., new form of stereoisomerism and a new form of glycine; theoretical interpretation, II, 101.
- and Bastian, A., elastoidin, II, 192.
- Engelbreth-Holm, J., and Frederiksen, O., transmission of mouse leucosis by cell-free solution, III, 4.
- Engelhard, H., and Schillke, W., absorption of aerosols in liquids, I, 196.
- Engelhardt, W., and Hülstrung, H., prevention of urolon paralysis in pigeons by vitamin-B₂, III, 774.
- Engelhardt, W. von. See Correns, C. W.
- Engelhardt, W. A., and Ljubimowa, M. N., myosine and adenosinetriphosphatase, III, 1097.
- Engelhart, E., uterine mucous membrane and synthetic oestrogenic substances, III, 146.
- and Pischinger, A., foetal deformities after deep X-irradiation of the mother, III, 1022.
- and Tscherne, E., causes and treatment of sterility in women, III, 1052.
- Engelkes, H., sympathico-endocrine insufficiency (a new syndrome), III, 135.
- Engelmann, F., light excitation with homogeneous canal rays of low velocity, I, 543.
- Engelmann, G. See Umber, F.
- Enger, R., Linder, F., and Sarre, H., effect of measured obstruction of the renal artery on blood pressure, III, 22. Renal hypertension in dogs following extirpation of the pituitary and the adrenals, III, 22.
- Enghoff, H., barospirograph, III, 365. "Half mask" for respiratory investigations, III, 1033.
- and Liedholm, K., Cheyne-Stokes respiration, III, 824.
- Liedholm, K., and Spiegel, E., blood gases and expired air in decerebrate dogs, III, 24.
- Engle, D. E., and Binger, M. W., blood pressure response of hypertensive patients to acetyl- β -methylcholine, III, 897.
- Engle, E. T., and Crafts, R. C., experimental uterine bleeding in monkeys following a single injection of various oestrogens, III, 383.
- and Smith, Philip E., endometrium of the monkey and oestrone-progesterone balance, III, 584. Actions of testosterone on endometrium of the monkey and on uterine bleeding, III, 983.
- Engle, H. R. See Laubengayer, A. W.
- Englebrecht, S. See Roberts, L. J.
- Englis, D. T., and Becker, H. C., selective oxidation of fructose with potassium ferriyanide, II, 235.
- English, J., jun., Bonner, J., and Haagen-Smit, A. J., wound hormones of plants. II. Isolation of a crystalline active substance, III, 949.
- See also Bonner, J.
- Enikeff, M., salinity of the subterranean waters of the western part of the interior delta of the Niger, I, 495. Transport of dissolved salts by the Niger in 1938, I, 541.
- Enkvist, T. [with Andersson, G.], condensation of cyanoacetamide with formaldehyde. III. Secondary amines as catalysts, II, 302.
- [with Tikkanen, P.], organic catalysts for removal of carbon monoxide from formamide, II, 249.
- Ennor, A. H., manometric determination of glutathione in tissue extracts, III, 953. Influence of anterior pituitary extracts on content and rate of oxidation of glutathione in tissues, III, 973.
- Enselma, Mayoux, and Nova, glycolysis of hypertrophic lymphoid tissue of the pharynx, III, 1078.
- Enselme, J., Revol, L., and Trintignac, P., sulphur content of diaphyses and epiphyses, III, 916.
- See also Piéry, M.
- Enselme, (Mme.) J. See Piéry, M.
- Ensinger, H., striped frog muscle investigated by micro-manipulation, III, 25.
- Ensor, C. See Bachmann, G., and Haldi, J.
- Ensworth, H. See Plummer, N.

- Entenman, C., Lorenz, F. W., and Chaikoff, I. L., endocrine control of lipin metabolism in the bird. I. Effects of pregnant mare serum on blood- and liver-lipins of domestic fowl, III, 57.
See also Lorenz, F. W., and Montgomery, M. L.
- Enzer, N. See Seevers, M. H.
- Enzmann, E. V., "ovoid bodies" from the oviducts of rabbits, III, 262.
- Epelbaum, S. E., and Chaikina, B. I., phosphorus compounds of the brain at various stages of embryonic and post-embryonic growth, III, 80.
- Epprecht, A. G., and Hornung, B., detection of nitrogen in the organic laboratory, II, 462.
- Eppson, H. F. See Bradley, W. B.
- Eppstein, S. H. See Morgulis, S., and Rose, W. C.
- Epshtein, D. A., equilibrium in the system $\text{NO}-\text{NO}_2-\text{HNO}_3-\text{H}_2\text{O}$ at 0° , I, 612.
and Kosterina, Z. N., system $\text{K}_2\text{O}-\text{N}_2\text{O}_5-\text{HCl}-\text{H}_2\text{O}$; solubility isotherms, I, 524.
and Tschirkova, L. A., vapour pressure in the system $\text{NO}-\text{NO}_2$, I, 371.
- Epstein, J. W. See Wasserman, P.
- Epstein, M. D. See Wender, L.
- Epstein, S., serological tests of vaccination "per os," III, 634. Photoallergy and primary photosensitivity to sulphanilamide, III, 773.
- Epstein, S. F., vitamin-C content of organs of hibernating animals, III, 604.
- Epstein, S. S., methylene-blue reduction by and oxidation reduction potential of members of the colon-aerogenes group of bacteria, III, 102.
- Epure, E., histophysiology of the digestive tube in *Herpobdella atomaria*, III, 270.
- Erachtin, V. A., oven with a temperature gradient, for the study of recrystallization phenomena, I, 158.
See also Zaimovski, A. S.
- Erb, M. B., and Dallenbach, K. M., "subjective" colours from line patterns, III, 676.
- Erbacher, K. See Grumbrecht, P., and Loeser, A.
- Erbacher, O., production of artificial radioactive phosphorus ^{32}P in unweighable amount from carbon disulphide, I, 232.
- Erbe, H. See Baumgarten, P.
- Erbring, H., swelling and solution of casein and starch in formamide, I, 419.
and Wenstop, K., stability of organosols, I, 75.
- Ercoli, A., biological transformation of androstene into androstane derivatives, III, 385.
- Ercoli, N., buffer action of inorganic constituents of bone, III, 67. Osteotropism of pharmaceutical substances. II. Dyes *in vitro*. III. Sodium alizarin-3-sulphonate *in vitro*. IV. Fixation of fluoride *in vitro*. V. Fixation of oxalate *in vitro*, III, 179, 510.
- Erden, F. See Edhem.
- Erdey, L. See Erdey-Gruz, T.
- Erdey-Gruz, T., and Erdey, L., behaviour of mercury amalgams in solutions containing corresponding and other ions, I, 266.
- Erdos, J., and László, B., apparatus for micro-steam-distillation, I, 45. Organic chemical operations with small amounts of material, II, 461.
- Erdos, T. See Annau, E.
- Erdtman, H., extractives of pine heart wood, II, 259.
- Erenyi, G., detection of zinc in presence of iron, I, 337.
- Erfing, H. D., thermal expansion of solids at low temperature. II. (Cr, β -Mn, Mo, Rh, Be, graphite, Ti, Zr, Bi, Sb, Sn, and beryl), I, 135.
- Ergang, R. See Schafmeister, P., and Vogel, R.
- Ergle, D. R., Hessler, L. E., and Adams, J. E., carbohydrates of the cotton plant under different seasonal conditions and fertiliser treatment, III, 533.
- Erickson, A. E. See Ruigh, W. L.
- Erickson, A. W. See Bradt, W. E.
- Erickson, B. N., Williams, H. H., Avrin, I., and Lee, P., lipin distribution of human platelets in health and disease, III, 353.
See also Beach, E. F., Bernstein, S. S., Ferguson, J. H., and Lee, P.
- Erickson, C. C. See Dill, L. V.
- Erickson, C. W., and Kepler, E. J., diabetic acidosis and superimposed alkalosis induced by sodium bicarbonate, III, 582.
- Erickson, J. See Bonner, J.
- Erickson, T. C., cardiac activity during epileptic seizures, III, 654. Neurogenic hyperthermia, III, 829.
- Eriksen, B. See Collett, E.
- Eriksen, F. See Jacobsen, E.
- Erit, J. D. See Braun, C. E.
- Erkama, J., fumarase effect of propionic bacteria, III, 98.
See also Virtanen, A. I.
- Erlanger, J., and Blair, E. A., action of isotonic, salt-free solutions on conduction in medullated nerve fibres, III, 369.
- Erlemann, F. See Chrometzka, F.
- Erlenmeyer, H., Bitterlin, O., and Weber, H. M., deuterium compounds; preparation of glyoxal- d_2 , trans-ethylenc- d_2 -dicarboxylic acid and *dl*- α - d_2 -hydroxyethane- d_2 - α -dicarboxylic acid, II, 242.
and Kleiber, A., dissociation constants of heterocyclic compounds of the formula $\text{CR}_2\cdot\text{CO}\cdot\text{NH}\cdot\text{CO}\cdot\text{X}$, I, 472.
and Schmid, E. H., isosteric and structurally similar compounds. XI. Preparation and properties of 2:2'-dithiazolyl, II, 348.
and Ueberwasser, H., isosteric and structurally similar compounds. IX. Comparative investigations with 3-hydroxybenzthiazole. XII. Preparation and properties of 4:4'-dithiazolyl, II, 39, 456.
- Erlachman, E. See Vogelaar, J. P. M.
- Erlbacher, O., treatment of chronic arthritis with rubrophen, III, 504.
- Ermakov, M. B., evolutionary physiology, III, 487.
and Medvedeva, N. B., nervous system and carbohydrate metabolism of invertebrates, III, 500.
- Ermakov, M. V., influence of endogenous factors on the diffusional type of respiration of invertebrates, III, 460. Thermal conductivity of the integuments of fish, III, 488.
- Ermolaeva, E. V. See Petrenko, B. G.
- Ernest, A., kjeldahlisation in laboratories not equipped with well ventilated fume cupboards, I, 534.
- Ernesto, T., experimental gastric polyposis, III, 395.
- Ernst, A. M., morphine, codeine, and coughing, III, 367.
- Ernst, E., osmosis and swelling and their biological significance, III, 785.
- Ernst, M., use of hypertonic solutions in treatment of increased cerebrospinal fluid pressure, III, 673.
- Ernst, M. M. See Woodmansey, A.
- Ernstene, A. C., treatment of coronary artery disease, III, 1032.
- Erochin, I. S. See Volarovitch, M. P.
- Erodi, A., vitamin therapy in oto-rhinolaryngology, III, 904.
- Erofeev, B. V., hydrogenation of iron nitrides, I, 618.
- Kobosev, N. I., Bogojavlenskaja, A., and Proskurnina, K., kinetics of reactions in which solids participate. II. III. Kinetics of the reduction of iron nitrides by hydrogen, I, 423.
and Trusova, K. I., kinetics of reactions in which solids participate. IV. Thermal decomposition of mercuric oxide, I, 424.
- Errera, M. See Bigwood, E. J.
- Erschler, B., and Frumkin, A., surface chemistry of the platinum electrode, I, 315.
See also Schligin, A.
- Erschova, N. See Chvostikov, I. A.
- Erskine, D., sulphonamide dermatitis, III, 1083.
See also Lloyd, V. E.
- Erspamer, V. See Vialli, M.
- Ertel, H., and Kolhorster, W., mean free path of mesotrons, I, 506.
- Ertl, E., treatment of hay fever with torantil, III, 867.
- Eru, I. Sachnovskaja, E. M., and Pitschko, V. A., destructive hydrogenation of quinoline, II, 281.
- Erve, J. van de. See Bruner, H. D.
- Ervin, G., jun. See Roller, P. S.
- Ervteman, J., and Heeres, P. A., alcohol-tolerance, III, 187.
- Erxleben, H. See Kogl, F.
- Esafov, V. I., application of the Grignard reaction to Δ^4 -ketones, II, 357. Acetylation of θ -dihydrostearic acids, and diastereoisomeric transformations of these acids when treated with acetic anhydride, II, 468.
and Torgaschina, Z. I., treatment of θ - λ -trihydroxystearic acids with acetone, II, 242.
- Escarras, A., effect of surgical trauma on metabolism of the guinea-pig, III, 996.
and Paillas, J. E., production of a local hypervitaminosis-A, III, 163.
- Esche, P. vor dem, determination of complement in sera, III, 1107.
- Escher, R. See Karrer, P.
- Escher-Desrivieres, J., variations in time of psychomotor visual reactions to illumination by white and coloured light, III, 838.
- Lederer, E., and Verrier, M. L., retinal pigment of cephalopods, III, 376.
- Eseourrou, R., C_{10} , C_{12} , and C_{14} aldehydes from copra oil, II, 406.
- Escribano, A. See Moles, E.
- Escudero, L., and Adams, W. E., spontaneous pneumothorax with massive atelectasis, III, 367.
- Eskridge, L. See Hegner, R.
- Esmer, N. See Seyhan, M.
- Esplí, L., and Genevois, L., micro-determination of vitamin-C, III, 168.
and Mandillon, G., determination of ascorbic acid, aldehydes, and ketones in blood by reduction and precipitation, III, 452.
- Ess, M. W. van. See under Van Ess, M. W.

- Esselen, *W. B., jun.*, influence of bacteria on oxidation of ascorbic acid, III, 995.
See also Kobren, A.
- Esser, *H., Eilender, W., and Bungardt, K.*, X-ray examination of metals at high temperatures, I, 64.
- Essex, *H. E., Herrick, J. F., Baldes, E. J., and Mann, F. C.*, influence of exercise on blood pressure, pulse rate, and coronary flow of the dog, III, 746.
See also Herrick, J. F., Lundy, J. S., Mann, F. C., Noth, P. H., and Steggerda, F. R.
- Essig, *S. F.*, structural characteristics of silver films, I, 185. Silver films on a mica crystal face, I, 185.
- Essin, *O., and Loschkarev, M.*, cathodic polarisation of nickel, I, 568.
and Markov, B., experimental verification of O. Stern's theory of double layer, I, 520.
See also Loschkarev, M.
- Estermann, *I.* See Ahlberg, J. E.
- Estes, *R. R.* See Quayle, O. R.
- Esther, *K. H.*, structure, development, and function of the oil gland of the pigeon, III, 226.
- Estreicher, *T., and Hubicki, W.*, application of mercurous nitrate to determination of selenites and selenates, I, 276.
- Ethridge, *C. B.* See Massie, E.
- Etienne, *H., and De Rassenfosse, A.*, [analysis of] platinocyanides, I, 220.
- Etienne, *R.*, life and work of Ernest Solvay, I, 283.
- Etienne-Martin, *P.*, are the polypeptides from tissue autolysis toxic? III, 184.
- Etkin, *W., and Rosenberg, L.*, infundibular lesion and pars intermedia activity in the tadpole, III, 259.
- Etteldorf, *J. N.*, treatment of gaseous hydrocyanic acid poisoning by sodium thiosulphate and sodium nitrite combination, III, 716.
- Ettle, *G. W., and Johnson, C. H.*, *cis-trans*-interconversion amongst co-ordination compounds. I. Investigation of the isomeric dichlorobisethylenediaminocobalt chlorides by means of a radioactive isotope of chlorine, I, 576.
- Ettori, *J., and Grangaud, R.*, effect of radius of centrifuge on the centrifugation of blood, III, 892. Reversibility of effects of oxygen and carbon dioxide in blood, III, 899. Effect of variation in partial pressure of oxygen on erythrocyte volume, III, 959. Effect of carbon dioxide tension on erythrocyte volume, III, 959. Effect of oxygenation of haemoglobin on influence of carbon dioxide on erythrocyte volume, III, 959. Measuring erythrocyte volume under different atmospheric conditions, III, 959.
- Etzler, *D. H., and Rollefson, G. K.*, photolysis of acetyl bromide, I, 330.
- Eucken, *A.*, rotation of molecules and ionic groups in crystals, I, 183.
and Küchler, *L.*, excitation of intramolecular vibrations by collision, I, 128.
and Schafer, *Klaus*, effect of hindered rotation of the CH₃ group in simple hydrocarbons on the mutual binding of the atoms, I, 242.
- Eugster, *J.*, determination of biological action of cosmic radiation, III, 784.
- Euler, *E.* See Ohle, H.
- Euler, *H., and Wergeland, H.*, expanded shower of cosmic rays in air, I, 446.
- Euler, *H. von*, biochemical cancer problems, III, 279. Axerophthol and vitamins-A (-A, and -A₂), III, 850.
and Adler, *E.*, flavin enzymes in the animal organism, III, 424.
and Bauer, *E.*, transformation of glycogen in Jensen sarcoma, III, 396.
Bauer, *E., and Lundberg, K.*, amyloamylose and amylopectin fractions as substrates in phosphorylating enzymic degradations, III, 199.
and Günther, *Gunnar*, diaphorase in blood: absence from the lens, III, 323. Transamination and dehydrogenation of glutamic acid by extracts of Jensen sarcoma, III, 699.
Günther, *Gunnar*, and Forsman, *N.*, enzyme systems in Jensen sarcoma, III, 848.
Günther, *Gunnar*, Malmberg, *M., and Karrer, P.*, axerophthol [vitamin-A] from β -apo-2-carotenol in the rat liver; vitamin-A action of a β -apo-2-carotenol derivative, III, 163.
and Hellström, *H.*, oxidation-reduction equilibrium in the system deamino-cozymase-alcohol apodehydrogenase-alcohol, III, 424. Purification of animal succinic dehydrogenase, III, 623. Enzymic studies of sarcoma. I. Effect of cytochromes and of diaphorase on the dehydrogenation of lactate and succinate, III, 939.
Hellström, *H., and Günther, Gunnar*, oxidation systems in top and bottom yeast, III, 724. Enzymic studies on degradation of carbohydrates, III, 625.
Hellström, *H., Günther, Gunnar*, Elliot, *L., and Elliot, S.*, enzymes of sarcoma and of chlorophyll-defective barley mutants, III, 786.
Hellström, *H., Schlenk, F., and Günther, Gunnar*, enzyme system of the oxidation-reduction metabolism in lens, III, 751.
and Malmberg, *M.*, effect of administration of ascorbic acid and citrin on content of erythrocytes capable of being stained in guinea-pigs' blood. III, 289. Reticulocyte count in rats deficient in vitamin-A, III, 547.
and Schlenk, *F.*, enzymes. I. Enzymic processes in Jensen sarcoma, III, 396.
Schlenk, *F., Heiwinkel, H., and Högberg, B.*, cozymase and nicotinamide contents of the animal body and of yeast, III, 324.
Schlenk, *F., Melzer, L., and Högberg, B.*, nicotinamide and cozymase in healthy and vitamin-deficient rats, III, 724.
and Vestin, *R.*, enzymic conversion of codehydrogenase I into codehydrogenase II, III, 423.
and Willstaedt, *H.*, aneurin content of muscle, III, 401.
See also Adler, *E.*, and Schlenk, *F.*
- Euler, *U. S. von*, reflex and central action of potassium ions on blood pressure and respiration, III, 310. Prostaglandin [from prostate], III, 385.
Liljestrand, *G., and Zotterman, Y.*, excitation mechanism of chemoreceptors of carotid body, III, 898.
See also Bjurstedt, *H.*
- Eustice, *(Miss) E. D.* See Lawson, A.
- Euw, *J. von*. See Reichstein, T.
- Evans, *A. C.*, effect of chemical composition of the plant on reproduction and on production of winged forms in *Brevicorine brassicae*, L. (Aphididae), III, 590.
- Evans, *B., and Hanks, J. H.*, growth of small numbers of acid-fast bacteria in blood and in serum, III, 877.
- Evans, *B. D. F., and Wills, L.*, red cell fragility in tropical macrocytic anaemia, III, 448.
- Evans, *B. H., and Ingram, W. R.*, effects of combined red nucleus and pyramidal lesions in cats, III, 830.
- Evans, *B. S.*, volumetric determination of tellurium, I, 96. Volumetric determination of vanadium, I, 102. New colour reagent for lead and its use as an indicator in the titration of various cations and anions (Pb, Zn, WO₃, MoO₃, V₂O₅, P₂O₅, As₂O₅), I, 157. Separation of selenium and its determination in lead alloys, I, 214.
- Evans, *C.* See Bourne, G.
- Evans, *C. H., and Hirschlaff, E.*, photographic reciprocity law at low temperature, I, 573.
See also Webb, *J. H.*
- Evans, *C. L.* See Bogue, J. Y.
- Evans, *D. G., and Maitland, H. B.*, toxin of *Br. bronchiseptica* and the relationship of this organism to *H. pertussis*, III, 428. Failure of whooping cough sera to neutralise *pertussis* toxin, III, 526. Agglutination as a diagnostic test for whooping cough, III, 526.
- Evans, *D. P., Watson, H. B., and Williams, R.*, *ortho*-effect. IV. Kinetics of the formation of *o*-substituted phenyltrimethylammonium iodide in methylalcoholic solution, I, 527. Formation of aryltrimethylammonium iodides in methylalcoholic solution, I, 527.
and Williams, *R.*, preparation of nuclear-substituted dimethylanilines, II, 414.
See also Bonner, *T. G., and Davies, W. C.*
- Evans, *E.* See Hart, B. F.
- Evans, *(Miss) E. B.* See Davies, W. C.
- Evans, *E. J.* See Kaye, G. W. C.
- Evans, *F. G.* See Rockwell, H.
- Evans, *F. L.*, simple and inexpensive cage for mice, III, 1113.
- Evans, *F. T.*, carbon dioxide absorber, III, 221.
- Evans, *G. M.* See Gaisford, W. F.
- Evans, *G. R.* See Walke, H.
- Evans, *H. C.* See Maxted, E. B.
- Evans, *H. D.* See Sage, B. H.
- Evans, *H. M., and Emerson, G. A.*, growth-stimulation by ferric chloride-treated wheat-germ oil, III, 1075.
- Fraenkel-Conrat, *H., Simpson, M. E., and Li, C. H.*, characterisation of gonadotropic hormones of hypophysis by their sugar and glucosamine content, III, 677.
- Simpson, *M. E., and Pencharz, R. I.*, relation between growth-promoting effects of pituitary and thyroid hormone, III, 973.
See also Emerson, *O. H., Ingle, D. J., Jensen, H., and Li, C. H.*
- Evans, *J. N.*, classic characteristics of defects of visual field, III, 1042.
See also McFarland, *R. A.*
- Evans, *K. L., and Arnold, L. E.*, poisoning with ackee (*Blighia sapida*), III, 190.
- Evans, *L. T., and Hegre, E.*, effects of ovarian hormones and seasons on *Anolis carolinensis*. I. The thyroid, III, 584.
- Evans, *M. E., and Gottschall, R. Y.*, preparation of scarlet fever toxin, III, 631.

- Evans, M. G., activation energies of reactions involving conjugated systems, I, 526.
- and Polanyi, M., luminescence of sodium vapour in highly dilute flames, I, 122.
- and Warhurst, E., mechanism of reactions between alkali metal atoms and methyl and phenyl halides, I, 326.
- Evans, P. R., biliary cirrhosis, III, 759.
- Evans, R. D., Goodman, C., Keevil, N. B., Lane, A. C., and Urry, W. D., intercalibration and comparison in two laboratories of measurements incident to the determination of the geologic ages of rocks, I, 437.
- and Kip, A. F., radium content of marine sediments from the East Indies, the Philippines, and Japan, and of the Mesozoic fossil clays of the East Indies, I, 46.
- See also Cooper, F. S.
- Evans, R. J., and Phillips, P. H., fluorine content of the thyroid gland in hyperthyroidism, III, 40. Skeletal storage of fluorine in the growing rat fed bone meals of varying fluorine content, III, 163.
- Evans, T. H. See Sandin, R. B.
- Evans, U. R. See Thornhill, R. S.
- Evans, W. A. See Thomson, K. J.
- Evans, W. C., Handley, W. R. C., and Happold, F. C., nutrition of *C. diphtheriae* (types *mitis*, *gravis*, and *intermediate*), III, 794. Nutrition of *C. diphtheriae*; pantothenic acid as essential growth factor for certain strains of *C. diphtheriae gravis*: synthesis of physiologically active compounds by *C. diphtheriae* cultures in synthetic media, III, 1100.
- Evans, W. L. See Brod, J. S., and Plunkett, R. J.
- Evans, W. V., and Braithwaite, D., electrolysis of magnesium *n*- and *iso*-propyl bromide in ethyl ether, II, 251.
- Evdokimov, A. G., action of anhydrous oxalic acid on polyhydric alcohols and hydrocarbons, II, 199.
- Evelbauer, K., treatment of periodic pains in the breasts, III, 266. Action of stilbene preparations, III, 1053.
- Eveleth, D. F., and Biester, H. E., blood chemistry in the study of nutritional diseases of swine, III, 289.
- and Schwarte, L. H., chemical changes in blood of swine infected with hog cholera, III, 1028.
- See also Biester, H. E.
- Evelyn, K. A., and Malloy, H. T., microdetermination of oxyhaemoglobin, methaemoglobin, and sulph-haemoglobin in a single blood sample, III, 230.
- Malloy, H. T., and Rosen, C., determination of ascorbic acid in urine with the photo-electric colorimeter, III, 291.
- See also Maughan, G. B.
- Evenden, W., and Schuster, C. E., new sharpening back and procedure of sharpening for microtome knives, III, 546.
- Evensen, O. K., and Schartum-Hansen, H., monocytic leukaemia, III, 115.
- Everett, D. H., and Wynne-Jones, W. F. K., dissociation of the ammonium ion and basic strength of ammonia in water, I, 199.
- Everett, J. W., spontaneous persistent oestrus in a strain of albino rats, III, 979.
- Everett, M. R. See Hart, J. P.
- Evering, B. L., thermal decomposition of petroleum hydrocarbons into free radicals, II, 399.
- Everitt, E. L. See Sullivan, M. X., and Veitch, F. P., *jun*.
- Evers, A., therapeutic use of sulphur-containing baths, III, 716.
- Eversole, U. H., use of helium in anaesthesia, III, 315.
- Eversole, W. J., effects of androgens on fish *Lebistes reticulatus*, III, 983.
- Evetzki, G. N., and Zlobinskaja, E. I., baryta method of determining small amounts of carbonates, I, 39.
- Evtuchova, M. L., biochemical changes in the blood and cerebrospinal fluid in uraemia, III, 151.
- and Guseva, V., diagnostic significance of the Takata-Ara reaction in liver diseases, III, 272.
- Ewald, H., analysis and interpretation of the spectra of neodymium salts, I, 118.
- Ewen, E. S., Spring, F. S., and Vickerstaff, T., triterpene resinols and related acids, VIII, II, 484.
- Ewens, R. V. G., and Lister, M. W., structures of molybdenum pentachloride and tungsten hexachloride, I, 12. Structure of iron pentacarbonyl and of iron and cobalt carbonyl hydrides, I, 406.
- See also Brockway, L. O., and Powell, Herbert M.
- Ewert, B. See Regner, E. G.
- Ewing, J., pathology of lymphosarcoma, III, 763.
- Ewing, L. M. See Smith, A. W.
- Ewing, M. E. See Larson, H. W.
- Ewing, W. F., adsorption of pigments; specific surface of some zinc oxides, I, 467.
- Brandner, J. D., and Guyer, W. R. F., heats of solution and of dilution of the binary systems zinc nitrate-water and cadmium nitrate-water, I, 201.
- and Guyer, W. R. F., binary system cadmium nitrate-water: vapour pressure-temperature relations, I, 27.
- Ewles, J., luminescence of inorganic salts, I, 123. Luminescence of wetted solids, I, 452.
- Exner, M. See Boller, R.
- Extermann, R., and Wannier, G., theory of diffraction of light by ultrasonic waves, I, 189.
- Eyck, M. van. See Verhaeghe, J.
- Eyer, H., and Rohrmann, A., external use of prontosil, III, 610.
- Eyer, S. W. See Dragstedt, C. A.
- Eyermann, C. H., emotional component of bronchial asthma, III, 25.
- Eymann, H. See Tyson, R. M.
- Eyre, J., liberation and utilisation of oxygen by the population of rock pools, III, 436.
- Eyring, H., Glasstone, S., and Laidler, K. J., theory of overvoltage, I, 567.
- See also Cernuschi, F., Condon, E. U., Gorin, E., Hirschfelder, J. O., and Kincaid, J. F.
- Eysenbach, H. See Hesse, G.
- Eyster, J. A. E., and Hipple, J. S., micro-meter curve measuring apparatus, III, 952.
- Ezickson, W. J., liver dysfunction as a factor in renal lithiasis, III, 691.
- Ezoe, H. See Nishina, Y.
- F.
- Faber, H. K. See Lubin, A. J., and Miller, J. J., *jun*.
- Fabiani, G., ganglion reaction in phenomenon of Arthus, III, 969.
- Fabre, P., nerve stimulation by high-frequency currents, III, 369. Absence of electrotonic effects following passage of high-frequency currents, III, 369. Stimulation produced by a single alternating impulse of short duration, III, 900. Limits of stimulating effect of liminal condenser discharges, III, 1035.
- Magnan, C., and Muraour, H., detonation of nitrogen iodide under the action of nuclear fragments from uranium bombarded by neutrons; experiments on other explosives, I, 616.
- Fabre, R. See Duvoir, M.
- Fabrikant, V., intensity of spectrum lines in the gas discharge, I, 228.
- and Panevkin, K., excitation of atoms in a rare-gas discharge, I, 167.
- and Rochlin, G., effect of magnetic field on mercury discharge radiation. II, I, 167.
- Facchini, A., motor symptoms of the labyrinth type during ether narcosis, III, 186. Individual respiratory responses to currents of air at varying temperatures, III, 462.
- Faerber, E. E., oxidase reaction of normal and tumour tissues, III, 1095.
- Fahey, J. See Kernwein, G.
- Fahey, J. J., colorimetric determination of fluorine with ferron, I, 486. Shortite, a new carbonate of sodium and calcium, I, 536.
- Fahey, K. R., and Green, A. A., viscosities of solutions of the proteins of horse serum, III, 320.
- Fahr, E., blood pressure determination in rabbits, III, 21.
- Fahr, G., treatment of cardiac irregularities, III, 309.
- Fahr, T., nephrosis, III, 390.
- Fahraeus, R., erythrocytes-plasma interface, III, 1025.
- Fahrentholz, S., measurement of very small resistance variations by means of oscillatory circuits of unstable frequency, I, 389.
- Fain, A., cause of death in extensive burns, III, 510.
- Fairbairn, H. W., correlation of quartz deformation with its crystal structure, I, 542.
- Fairbairn, R. E. See Drew, H. D. K.
- Fairechild, J. G., separation of cobalt from manganese, I, 489.
- See also Schaller, W. T.
- Fairelough, R. A., and Hinshelwood, C. N., kinetics of esterification of normal fatty acids, I, 327.
- Fairhall, L. T., precision methods in determination of heavy metals, III, 640. Solubility of lead arsenate in body fluids, III, 1088.
- Fairley, N. H., methaemalbumin (pseudo-methaemoglobin), III, 230.
- Fairman, H. D. See Bryant, J.
- Faivre, R., and Michel, A., chemical composition and crystalline structure of the product of slow oxidation of magnesium in presence of moisture, I, 380.
- Fajans, K., and Stewart, D. W., induced radioactivity in europium, I, 591.
- Fajerman, H. See Daels, F.

- Falconer, B., calcification of hyaline cartilage in man, III, 155.
- Falconer, E. H., significance of punctate basophilia, III, 549.
- Falconer, M. A., blood chemistry in intestinal obstruction, III, 270.
- Osterberg, A. E., and Bagen, J. A., serum bases during intestinal obstruction, III, 593.
- Falconer, R., and Gulland, J. M., constitution of the purine nucleosides. VIII. Uric acid riboside, III, 986.
- Gulland, J. M., Hobday, G. I., and Jackson, (Miss) E. M., constitution of yeast-ribonucleic acid. II. Guanine-uridylic acid, II, 346.
- Fales, H. A., and Thompson, W. S., factors influencing the determination of sulphate as barium sulphate, I, 335.
- Falin, L. I., and Gromzewa, K. E., experimental teratoma testis in fowl produced by injections of zinc sulphate solution, III, 846.
- Falik, E. See Zeghauser, A.
- Falk, G. K. See Cardone, E.
- Falk, K. G. See Siegel, L., and Truhlar, J.
- Falke, vitamin-C consumption during fever, III, 852. Comparative determination of serum- and urinary ascorbic acid, III, 852.
- Falkenhagen, H., relaxation and electrical phenomena, I, 127.
- Falkiner, N. McL. See Martin, C. P.
- Faller, (Mlle.). See Duquénou, P.
- Fallis, A. M. See Gwatkin, R.
- Fallon, L. D. See Harned, H. S.
- Falsia, M. V., medical assistance in labour, III, 143.
- Falta, W., insulin requirements and type of diabetes mellitus, III, 754.
- Faltings, K., photochemical investigations in the Schumann ultra-violet. VIII. Photochemical decomposition of ethane, I, 425.
- Faltis, F., and Holzinger, L., constitution of cassaine and partial synthesis of the alkaloid, II, 459.
- Fang, H. C., thymol in the treatment of actinomycosis, III, 307.
- Fankuchen, I. See Bernal, J. D., and Riley, D. P.
- Fanni, A., changes in platelet count of the peripheral blood of rabbits exposed to short-wave irradiation, III, 420.
- Fano, U., possibility of the disintegration of very heavy nuclei into two nuclei of medium weight, I, 398.
- Fantus, B., and Schirmer, E. H., therapy of the Cook County Hospital; blood preservation technique, III, 7.
- Faraggiana, R., histological studies on cutaneous glands in Amphibia, III, 113.
- Fardon, J. C., and Sullivan, W. A., respiration changes following irradiation with X-rays, III, 514. Growth-promoting substances from injured tissue *in vitro*, III, 597. Effect of steam distillate of yeast on the growth of embryonic tissue *in vitro*, III, 607.
- Farinaud, E., Canet, J., and Lataste, C., mode of action of quinaquine, III, 1000.
- Lataste, C., Baccialone, L., and Canet, J., relation between concentration in the blood and elimination in the urine of quinaquine, III, 775.
- See also Lataste, C.
- Farineau, J., electronic structure of copper-aluminium alloys, I, 138. $K\beta$ lines of the oxides of magnesium, aluminium, and silicon, and of silicon carbide; origin of certain satellites, I, 441.
- Farineau, J., X-ray emission spectra and electronic structure of Al-Cu and Al-Ni alloys, I, 559.
- and Morand, M., electronic structure of the 3d layers of atoms of nickel and of copper in nickel-copper alloys, I, 70.
- Faris, A. M. See Cadden, J. F.
- Farkas, A., activation of hydrogen in catalytic reactions of hydrocarbons, I, 529.
- and Farkas, L., catalytic interaction of acetone and isopropyl alcohol with deuterium on platinum, I, 478. Catalytic exchange of hydrogen atoms between molecular deuterium and *n*-hexane and cyclohexane, I, 529.
- See also Farkas, L.
- Farkas, G. von, colloid osmotic pressure of blood, III, 229.
- Farkas, L., and Farkas, A., catalytic exchange of deuterium and hydrogen in hydrocarbons, I, 270.
- and Garbatski, U., conversion of para-hydrogen in presence of nitric oxide in aqueous solution: (collision number between solute molecules), I, 87.
- and Sandler, L., ortho-para conversion of hydrogen in diamagnetic liquids, I, 149.
- See also Farkas, A.
- Farmer, C. J. See Abt, A. F., and Alt, H. L.
- Farmer, E., accident proneness and accident liability, III, 93.
- Farmer, E. H., low-molecular polymerisation of dienes and trienes, II, 466.
- and Farooq, M. O., properties of conjugated compounds. XX. Diphenylketen as an addendum, II, 72.
- Farmer, L., inhibitory action of narcotics on histamine contraction of plain muscle, III, 312. Use of urethane in symptomatic treatment of bronchial asthma, III, 367.
- Farmer, S. N., and Maizels, M., organic anions of human erythrocytes, III, 350.
- Farmin, R., disintegration and exfoliation of granite in Egypt, I, 47.
- Farnham, W. B. See Pierce, H. B.
- Farooq, M. O. See Farmer, E. H.
- Farquhar, B. S. See Fry, H. S.
- Farquharson, J., and Ady, (Miss) P., magnetism and polymerisation [of dimethylbutadiene], I, 455.
- and Smith, K. W., post-parturient hæmoglobinuria of cattle, III, 275.
- Farr, L. E., basal metabolic rate of young children with nephrotic syndrome, III, 1076.
- Hare, R., and Phillips, R. A., urea clearances of cats with diabetes insipidus, III, 49.
- and Moen, J. K., effect of induced hyperpyrexia on urea clearance of rheumatic patients, III, 486.
- and Van Slyke, D. D., relation between plasma-protein level and oedema in nephrotic children, III, 1029.
- See also Smadel, J. E.
- Farr, W. K., microscopic structure of plant cell membranes in relation to the micellar hypothesis, III, 110. Behaviour of the cell membrane of the cotton fibre in cuprammonium hydroxide solution, III, 217.
- and Sisson, W. A., membranes of epidermal cells of the *Avena* coleoptile, III, 537.
- Farrell, J. I., secretion of alcohol by the genital tract, III, 313.
- Farrell, M. J., use of prostigmine as a preparation for abdominal roentgenography, III, 505.
- Farris, E. J., emotional lymphocytosis in the albino rat, III, 548. Increase in lymphocytes in healthy persons under emotional states, III, 548.
- Fasciolo, J. C., effect of healthy kidney on hypertension produced by renal ischaemia, III, 22.
- and Cramer, F. K., eye lesions in dogs with arterial hypertension produced by renal ischaemia, III, 22.
- Houssay, B. A., and Taquini, A. C., blood-pressure-raising secretion of ischaemic kidney, III, 239.
- Fasselt, H., untoward effects during surface pantocain anaesthesia [of respiratory tract], III, 933.
- Fassett, D. W. See De Beer, E. J., and Hjort, A. M.
- Fast, J. D., preparation of pure titanium iodides, I, 210. Preparation of pure metals of the titanium group by thermal decomposition of their iodides. V. Titanium, I, 332. Transition-point diagram of the zirconium-titanium system, I, 606.
- See also De Boer, J. H.
- Fatalizade, F. A., acenaphthene-induced polyploidy in *Nicotiana*, III, 637.
- Fatherree, T. J., and Allen, E. V., sympathetic vasodilator fibres in upper and lower extremities, III, 362.
- Fauconnier, J. See Le Chuiton, F.
- Faulkner, J. M. See Ellis, L. B.
- Fauré-Fremiet, E. See Champetier, G.
- Faus, J. See Dolejšek, V.
- Fausser, K. See Theilacker, W.
- Faust, E., localised clastosis of the renal cortex, III, 595.
- Faust, G. T., and Cooke, S. R. B., ocular photo-cell for the rapid determination of projected area of opaque particles, I, 580.
- Faust, W. See Skita, A.
- Fautrez, J., cellular substrate of atrophied coloured particles, III, 740.
- and Lison, L., diffusibility of dyes, I, 250.
- Fauvet, E., development and function of mammary glands, III, 756.
- Favejee, J. C. L., technique in X-ray analysis of clays, I, 491.
- Favez, H. See Perrier, A.
- Favorskaja, T. A., isomeric transformations of halogen derivatives of unsaturated aliphatic hydrocarbons. I. Action of hydrochloric acid on dimethylacetylenylcarbinol in presence of ammonium chloride and cupric or cuprous chloride. II. Hydrolysis of α -chloro- γ -methylallene, II, 354, 530.
- Favorski, A. E., theory of structure and problems of the dynamics of organic molecules, I, 128.
- and Lebedeva, A. I., syntheses of terpenes from acetylene, II, 45.
- Fawaz, G. See Zeile, K.
- Fawcett, G. S., assay of tinctorial strength of chlorophyll, III, 639.
- Fawcett, M. N. See Cawthorne, T.
- Fawsitt, C. E., and Stanhope, R. W., viscosities of complex salts in aqueous solution, I, 136.
- Fay, K. See Dieterle, H.
- Fay, M., Andersch, M., and Kenyon, M. B., blood studies under anaesthesia. I. Ether administered to the dog by open drop and in a closed system. II. cycloPropane and ethyl ether, III, 863.

- Fazekas, I. G., hypertrophy of adrenal cortex produced by ammonia solution, III, 1051.
- Fazekas, J. F. See Himwich, H. E.
- Fazio, F. See Cacioppo, F., and Sarzana, G.
- Fearon, W. R., carbamido-diacetyl reaction: test for citrulline, III, 804.
- Feather, N., absorption method of investigating the primary β -particles from radioactive substances, I, 170. Time involved in the process of nuclear fission, I, 350. Fission of heavy nuclei: a new type of nuclear disintegration, I, 443. Deuteron bombardment of silver, I, 592.
- and Bretscher, E., atomic numbers of the so-called transuranic elements, I, 234.
- and Dunworth, J. V., nuclear isomerism: application of the method of coincidence counting to the investigation of the γ -rays omitted by uranium-Z and the radio-active silver ^{106}Ag , I, 116.
- Fedenev, N. N., ultra-violet fluorescence in crystals of alkali halides with U and F centres, I, 241.
- Feder, E. E. See Hieber, W.
- Fédial, T. P. See Smorodincev, I. A.
- Fediushin, M. P., monocytosis as an index of cytotoxic stimulation of the active mesenchyme in cancer patients, III, 282. Application of anti-reticular cytotoxic serum to human cancer, III, 490.
- Fedoroff, B. See Demassieux, (Mme.) N.
- Fedorov, B. P., and Chodak, A. L., stirring arrangement for tubular electric ovens, I, 220.
- and Scheludiakova, E. I., anthracene derivatives. III. Synthesis of anthracene-2:9:10-trisulphonic acid, II, 254.
- Fedorov, G. I. See Chmelevski, V. I.
- Fedorov, I. A. See Lebedinski, V. V.
- Fedorov, N. A., and Namiatuisheva, A. M., carbohydrate metabolism in adrenal diabetes; data on angiotomised dogs, III, 300.
- Fedorov, N. O., pathogenesis of heterotransfusional shock, III, 353.
- Fedorov, N. T., regularities underlying the effect of indirect stimuli (Nebenreiz) on the discrimination sensitivity of the eye, III, 674.
- and Fedorova, V. I., number of light-sensitive substances in the retina, III, 675.
- and Mkrlicheva, L., mechanism of light flicker fusion during the course of dark- and light-adaptation, III, 254.
- Fedorov, V. R., Spriskov, A. A., and Scheludiakova, E. I., diazotation, decomposition of diazo-compounds, and coupling of isomeric xylydines with *p*-nitrobenzenediazonium salts, II, 58.
- Fedorova, A. M. See Rodionov, V. M.
- Fedorova, O. S., drop analysis, I, 625.
- Fedorova, V. I. See Fedorov, N. T.
- Fedorus, G. A. See Ljaschenko, V. I.
- Feenberg, E., shape and stability of heavy nuclei, I, 237. Detonation of nitrogen iodide by nuclear fission, I, 426. See also Bardeen, J., and Motz, L.
- Fegler, J., changes in dead space of respiratory tract under low barometric pressure, III, 24.
- and Kowarzyk, H., sodium cyanide and choline-esterase, III, 14.
- Kowarzyk, H., and Szpunar, J., destruction of acetylcholine in blood, III, 14.
- Fehlow, W., gold treatment of pulmonary tuberculosis, III, 779.
- Wolff, K., and Steinkamp, F., oxygen capacity of blood of rheumatics, III, 24.
- Fehr, A., and Winzeler, H., new test of circulatory function, III, 557.
- Feigelson, I. B., Gruschvitski, V. E., and Korobotschkina, T. V., synthesis of inderite, I, 436.
- Valjaschko, M. G., and Bergman, A. G., occurrence of boron in salt lakes of Aral-Kaspian region, I, 434. See also Schlesinger, N. A.
- Feigenbaum, A., bitemporal disturbances of visual field (excluding those caused by pituitary tumours) in endocrine-vegetative affections, III, 1042.
- Feigenbaum, J., non-hydrolytic degradation products of fibrin; action of proteinases on them, II, 294.
- Feigl, F., inorganic and organic spot-analysis, I, 94. Inorganic spot analysis, I, 387.
- Fein, H. D. See Ralli, E. P.
- Feinberg, J. G., Hughes, J. S., and Scott, H. M., fluctuations of calcium and inorganic phosphorus in blood of laying hens during the cycle of one egg, III, 14.
- Feinberg, S. M., and Bernstein, T. B., asthma and hay fever, III, 661.
- Feinblatt, H. M., juvenile diabetes mellitus treated with insulin, III, 380.
- Feinschmidt, O. See Ferdman, D.
- Feinstone, W. H. See Bliss, E. A., and Long, P. H.
- Feissolle, L. See Fournier, J.
- Feistmann, E. See Liechti, A.
- Feitelberg, S., and Lampf, H., action of narcotics, hypnotics, and anaesthetics on brain temperature, III, 571.
- Pick, E. P., and Warsberg, A. von, central heat production and its inhibition by aromatic amines and acetylcholine, III, 711.
- Feitknecht, W., topochemical reactions of hydroxides and basic salts, I, 273.
- Fejes, K., diphtheria injection and blood antitoxin, III, 794.
- Fejfer, J., and Jahoda, M., double crystal [X-ray] spectrometer with photographic recording; measurement of the imperfection of crystals, I, 43.
- Fekete, E., comparative morphological study of the mammary gland in a high- and a low-tumour strain of mice, III, 69.
- See also Woolley, G.
- Feldberg, W., Holden, H. F., and Kellaway, C. H., formation of lysocithin and of muscle-stimulating substance by snake venoms, III, 184.
- and Kellaway, C. H., liberation of histamine by staphylococcal toxin and mercuric chloride, III, 103. Liberation of histamine and formation of lysocithin-like substances by cobra venom, III, 183.
- Feldman, H. B., and Powell, L., determination of halogens in organic compounds, II, 193.
- Feldman, J. B. See Wohl, M. G.
- Feldman, R. V., application of stannic bromide to the determination of caesium in presence of rubidium and potassium, I, 98.
- Feldman, W. H., and Hinshaw, H. C., effect of sulphapyridine on experimental tuberculosis in the guinea-pig, III, 611. See also Stasney, J.
- Feldweg, P., mortality rate of premature infants [and diet], III, 282.
- Felix, A., serum therapy of typhoid, III, 104.
- Felix, K., and Eger, W., formation of fat from carbohydrates in fat organs, III, 172.
- and Mager, A., compounds of clupein with prosthetic groups. II. Prosthetic group in pepsin, III, 722.
- and Zorn, K., specificity of *d*-amino-acid oxidase, III, 720.
- Felke, action of chemotherapeutics on gonococci, III, 774.
- Fell, E. H., X-ray studies on effect of opium on gastro-intestinal tract in man, III, 86.
- See also Miller, E. M.
- Fell, H. B., and Grüneberg, H., histology and self-differentiating capacity of abnormal cartilage in a new lethal mutation in the rat (*Rattus norvegicus*), III, 889.
- Fellenberg, T. von, iodine level of Blumenstein, Berne, III, 73. Does there exist a connexion between the fluorine content of drinking water and goitre? III, 73.
- Feller, A. E., and Hurevitz, H. M., acute nephritis with cardiac failure, III, 123.
- Fellers, C. R. See Kobren, A.
- Fellinger, K., thyroid therapy of obesity, III, 138. Lipoidal antithyrotropic substances [in blood] and vitamin-A, III, 232. Diagnosis and pathology of early stages of chronic industrial benzene poisoning, III, 780.
- See also Albrecht, W.
- Fellows, E. J., calcium creosotate, III, 860.
- Fels, E., inactivation of œstrone in the organism, III, 980.
- Fels, S. S. See Shay, H.
- Felsen, J., and Osofsky, A. G., gastric barrier in bacillary dysentery, III, 386.
- Felsing, W. A. See Allen, B. B., Dailey, B. P., Kenner, C. T., and Patterson, A., jun.
- Felsovanyi, A. V. See Kohn, H. I.
- Feng, T. P., propagation of veratrine contracture, III, 26. Neuro-muscular junction. XIII. Localised electrical negativity of muscle around neuro-muscular junction due to high-frequency nerve stimulation, III, 900.
- Li, T. H., and Ting, Y. C., repetitive discharges and inhibitory after-effect in post-tetanically facilitated responses of cat muscles to single nerve volleys, III, 662.
- Fenici, A. See Coppo, M.
- Fenn, W. O., factors affecting loss of potassium from stimulated muscles, III, 243. Deposition of potassium and phosphate with glycogen in rat livers, III, 594.
- See also Wells, J. H.
- Fenner, C. N., contact relations between rhyolite and basalt on Gardiner River, Yellowstone Park, I, 48.
- Fenning, R. W., and Whiffin, A. C., specific heat of gases at high temperatures, I, 514.
- Fenoglio, M., two minettes from Val Nambrene (Adamello group), I, 164.
- Fenton, R. A., pathways of referred pain [and vascular reflexes] from the nose [to the ear], III, 238.
- Fenz, E., gastric acidity in diabetics, III, 689.
- and Zell, F., diminution of blood-cholesterol by præhormone, III, 13.

- Feodosiev, *N.*, comparative investigation of the usual and the adiabatic methods of determining the heat capacity of solids at low temperatures, I, 432.
- Feofilaktov, *V. V.*, and Onischtschenko, *A. S.*, synthesis of oxyproline (γ -hydroxyprolindine- α -carboxylic acid), II, 35. Action of nitrous acid on α -substituted γ -butyrolactones, II, 356. Action of benzenediazonium chloride on α -substituted γ -butyrolactones, II, 364. Interaction of α -cyano- γ -butyrolactone with benzenediazonium chloride, II, 364.
- See also Demjanov, *N. J.*
- Ferber, *E.*, and Bendix, *H.*, 4-aminocyclohexylacetic acid, II, 263.
- and Brückner, *Hans*, synthesis of 4-aminocyclohexyl methyl ketone, II, 323.
- Ferber, *M.*, determining the degree of distribution of the disintegrations of polonium atoms, I, 231.
- Ferdinand, *R.* See Möller, *E. F.*
- Ferdman, *D.*, adenine nucleotides and nucleotide-like compounds, III, 763.
- and Feinschmidt, *O.*, adenine-nucleotides in chemistry of muscular activity, III, 567.
- Ferens, *B.* See Wojtusiak, *R. J.*
- Feresten, *M.*, and Wimpfheimer, *S.*, patency of the uterotubal junction of the rabbit, III, 586.
- See also Wimpfheimer, *S.*
- Ferguson, *A. L.*, polarisation and over-voltage with special attention to transfer resistance, I, 567.
- Ferguson, *C.*, Buchholtz, *M.*, and Gromet, *R. Y.*, sulphanilamide therapy in gonorrhœa, III, 857.
- Ferguson, *C. V.* See Dornte, *R. W.*
- Ferguson, *E.* See Plotz, *M.*
- Ferguson, *E. A.* See Alpert, *B.*
- Ferguson, *J. B.* See Janis, *A. A.*
- Ferguson, *J. H.*, quantitative relationships of calcium and kephalin in experimental thrombin formation, III, 10.
- and DuBois, *D.*, p_H of clotting and citrated blood, III, 231.
- and Erickson, *B. N.*, new fibrinogen preparation, III, 959. Calcium and kephalin in relation to clotting power of crystalline trypsin, III, 1027.
- Ferguson, *J. K. W.*, anesthetic properties of allene (propadiene), III, 933.
- See also Haterius, *H. O.*, and Hitchcock, *F. A.*
- Ferhat-Akat, *S.*, hearing in amphibia, III, 839.
- Feriantschitsch, *F. A.*, and Jordanski, *D. N.*, standard coloured solutions for colorimetric determination of tungsten and molybdenum, I, 101.
- Ferla, *F.* See Cacciapuoti, *B. N.*
- Fermi, *E.*, application of artificially-produced radioactivity, I, 159. Movement of neutrons in substances containing hydrogen, I, 396.
- See also Amaldi, *E.*, and Anderson, *H. L.*
- Fernald, *A. T.* See Marshak, *A.*, and Sebesta, *V.*
- Fernandes, *A.*, excretion of vitamin-C in urine and the state of saturation in normal individuals in Bombay, III, 768.
- Fernandez, *L.* See Sampson, *W. L.*
- Fernando, *P. B.*, D'Silva, *M.*, Stork, *G. K. B.*, and Sinnatamby, *G. R.*, tetrachloroethylene in treatment of hookworm disease, III, 614.
- Fernelius, *W. C.* See Bowerman, *E. W.*, and Watt, *G. W.*
- Ferner, *N.*, argentophilo cells in post-natal development of human islets of Langerhans, III, 808.
- Fernholz, *E.*, Ansbacher, *S.*, and Moore, *M. L.*, colour reaction for vitamin-K, III, 853.
- and Moore, *M. L.*, isolation of α -spinasterol from lucerne, III, 1019.
- and Stavely, *H. E.*, brassicasterol. I. Empirical formula and hydrogenation, II, 112. Stigmasterol 22:23-dibromide, II, 546.
- See also Ansbacher, *S.*, and Ladenburg, *K.*
- Fernholz, *M. E.* See Hahn, *G.*
- Ferraloro, *G.*, and Di Giorgio, *A. M.*, effect of respiratory resistance, during rest or manual work, on the reaction time and differentiation of light intensity, III, 661.
- and Torrini, *G.*, hearing capacity during respiratory resistance, III, 661.
- See also Di Giorgio, *A. M.*
- Ferrannini, *A.*, therapeutics of mitral and aortic regurgitation, III, 310.
- Ferrari, *A.*, salts of heteropoly-acids. I. Structure of phospho- and arsenodecamolybdates and of phospho- and arsenodecatungstates of ammonium, potassium, and thallium, I, 575.
- and Coghi, *L.*, cobaltinitrites of bivalent metals, I, 244.
- and Magnani, *A.*, polyborates. I. Alkali borates, I, 426.
- and Pareti, *G.*, polyborates. II. Tetraalkylammonium borates, I, 426.
- Ferrarini, *M.*, the wrist joint, III, 111.
- Ferree, *C. E.*, and Rand, *G.*, pilot [visual] fitness for night flying, III, 753.
- Ferreira, *A. E. M.*, post-operative "gas pains" without gas, III, 64.
- Ferrell, *E.* See Jones, *Grinnell*.
- Ferretti, *B.*, source of the soft cosmic radiation at sea-level, I, 175.
- See also Bernardini, *G.*
- Ferretto, *F.* See Maxia, *C.*
- Ferri, *C.* See Dansi, *A.*
- Ferri, *E.*, and Ferroni, *C.*, changes in ovarian arteries with age, III, 144.
- See also Ferroni, *C.*
- Ferriani, *G.*, keratinous degeneration of the coccygeal gland of *Gallus domesticus* in relation to rickets, III, 705. Relationship between coccygeal gland and rickets, III, 852.
- Ferrieh, *M.* See Flamiani, *G.*
- Ferrié, *J.*, case of retinitis pigmentosa; ætiology of the disease, III, 1042.
- See also Dejean, *C.*
- Ferris, *E. B., jun.*, effect of high intracranial venous pressure on cerebral circulation and its relation to cerebral symptoms, III, 362.
- Ferris, *H. W.*, cirrhosis of the liver in rabbits with continued chloroform poisoning and with associated syphilitic infection, III, 149.
- Ferroni, *C.*, and Ferri, *E.*, alterations of the blood vessels of the ovary with age, III, 584.
- See also Ferri, *E.*
- Ferry, *C. W.*, vacuum regulator, I, 105.
- Ferry, *J. D.* See Cohn, *E. J.*
- Fersman, *A. E.*, geochemistry of the environs of Kislovodsk, I, 285.
- Fert, *O.*, magnetic rotatory power of deuterobenzene and deuterethyl deuter-alcohol; thermal variation, I, 598.
- See also Dupouy, *G.*
- Fertel, *G. E. F.*, Moon, *P. B.*, Thomson, *G. P.*, and Wynn-Williams, *C. E.*, velocity distribution of thermal neutrons, I, 53.
- See also Heitler, *W.*, and Powell, *C. F.*
- Fessard, *A.*, and Matthews, *B. H. C.*, unitary synaptic potentials, III, 569.
- See also Auger, *D.*
- Fester, *G. A.*, leaves of red quebracho, III, 884.
- Fethke, *N.*, effect of salts of normal saturated fatty acids on phagocytosis *in vitro*, III, 812.
- Fetscher, *C. A.*, and Bogert, *M. T.*, quinazolines. XLIV. Synthesis of new quinazoline derivatives of veratrole akin to alkaloids, II, 285.
- Fett, *R.* See Jander, *W.*
- Fetterman, *J. L.*, and Pritchard, *W. H.*, cerebral complications following ligation of the carotid artery, III, 749.
- Feuer, *H.* See Cahen, *R.*
- Feulgen, *R.*, and Behrens, *M.*, plasmalogen. III. Identification of plasmalogen, III, 68.
- and Bersin, *T.*, plasmalogen. IV. New group of phosphatides (acetalphosphatides), III, 915.
- and Grünberg, *H.*, determination of plasmal (plasmalogen) in lipid mixtures and in organs, III, 394.
- Fevold, *H. L.*, extraction and standardisation of pituitary follicle-stimulating and luteinising hormones, III, 577. Chemical differences of follicle-stimulating and luteinising hormones of the pituitary, III, 678.
- and Fiske, *V. M.*, inhibition of action of follicle-stimulating hormone by pituitary, III, 840.
- Fiske, *V. M.*, and Nathanson, *I. T.*, gonadotropic reactions produced by urine from a case of chorion-epithelioma, III, 588.
- Février, *P.*, indiscernibility of corpuscles, I, 446.
- Feyel, *P.* See Adrianopoulos, *A.*, and Vieilletosse, *R.*
- Feyel, *T.*, contraction of striated muscle following thermal stimulation, III, 26. Cytoplasmic constituents and evolution of acidophil cells of anterior pituitary in guinea-pig, III, 1046. Cytology of pars tuberalis of guinea-pig pituitary, III, 1047.
- Feynman, *R. P.*, forces in molecules, I, 553.
- Fichera, *G.*, effect of xanthine derivatives on muscular work, III, 464.
- Fichtenberg, *D. G.*, analysis of tissues containing morphine and oxydimorphine, III, 539.
- and Lévy, *Jeanne*, biological determination of small quantities of morphine, III, 539.
- Fichter, *F.*, electrochemical experiments with various organic acids, I, 271.
- and Gunst, *R.*, electrochemical oxidation of 5:5'-azo-*m*-xylene [3:5:3':5'-tetramethylazobenzene], II, 151. Electrolysis of mixtures of pivalates with nitrates, II, 532.
- and Maritz, *A.*, sulphur tetroxide (SO₄), I, 382. Ethyl trimesate as by-product of the electrolysis of ethyl hydrogen succinate, II, 98.
- and Stenzl, *H.*, Kolbe's electro-synthesis with aromatic acids; benzoic, phenylacetic, β -phenylpropionic, and phenoxycetic acid, I, 422.

- Fichter, F., and Stenzl, H., electrolysis of hydrindene-2-carboxylic acid, II, 214. Kolbo's electrolysis in the case of an aromatic acid, II, 264.
- Fichtner, F. See Lieser, T.
- Fick, R. See Pummerer, R.
- Ficklen, J. B., simple combustion type of carbon monoxide estimation, I, 104.
- Fidlar, E., Sheppard, Margaret, and McHenry, E. W., physiology of ascorbic acid. II. Increase in metabolism of guinea-pigs on an ascorbic acid-deficient diet, III, 402.
- Field, G. B., reactions of beryllium chloride; normal and basic organic salts of beryllium, I, 482.
- Field, H., jun. See Melnick, D.
- Field, J., jun., Belding, H. S., and Martin, A. W., evaluation of wet and dry weight bases for expression of respiratory rate *in vitro*, III, 1076.
- Field, J. W., and Le Fleming, H., morphology of malarial parasites in thick blood films. I. Thick-film morphology of *Plasmodium vivax*, III, 427.
- Fierz, M., confusion of radiation with ozone and ozonides, I, 231.
- Fierz-David, H. E., Jadassohn, W., and Kleemann, A., anaphylaxis with chemically known substances, II, 257.
- and Kuster, W., homologous series of acylated azo-dyes from *o*- and *p*-acylamidophenols and 1:7-acylamidonaphthols, II, 151.
- and Meister, H., homologous series of *N*-acyl-*m*-aminophenols and azo-dyes obtained therefrom, II, 311.
- and Rossi, C., preparation of naphthoyleineiminazoles, II, 38.
- Fieser, L. F., synthesis of 2-methyl-3-phytyl-1:4-naphthaquinone, II, 513. Identity of synthetic 2-methyl-3-phytyl-1:4-naphthaquinone and vitamin-K₁, II, 513.
- Bowen, D. M., Campbell, W. P., Fieser, (Mrs.) M., Fry, E. M., Jones, R. N., Riegel, B., Schweitzer, C. E., and Smith, P. G., quinones having vitamin-K activity, II, 432.
- Bowen, D. M., Campbell, W. P., Fry, E. M., and Gates, M. D., jun., synthesis of antihemorrhagic compounds, II, 432.
- and Bradsher, C. K., 4-alkyl derivatives of 1:2-naphthaquinone, II, 168.
- and Campbell, W. P., substitution reactions of dehydroabietic acid, II, 30. Hydroxy- and amino-derivatives of dehydroabietic acid and dehydroabietinol, II, 517.
- Campbell, W. P., and Fry, E. M., synthesis of quinones related to vitamins-K₁ and -K₂, II, 513.
- Campbell, W. P., Fry, E. M., and Gates, M. D., jun., synthetic approach to vitamin-K₁, II, 513.
- and Cason, J., synthesis of 1:9-methylene-1:2-benzanthracene and related hydrocarbons, II, 413.
- and Fieser, (Mrs.) M., synthesis from β -naphthaquinol of a tautomeride of 4-benzyl-1:2-naphthaquinone, II, 216.
- Fry, E. M., and Jones, R. N., sarsasapogenin. IV. Sarsasapogenoic acid and related compounds, II, 437.
- and Hershberg, E. B., inter- and intramolecular acylations with hydrogen fluoride, II, 325. Orientation of 3:4-benzopyrene in substitution reactions, II, 364.
- Fieser, L. F., and Jacobsen, R. P., sarsasapogenin. II. Sarsasapogenoic acid. III. Deoxysarsapogenin and degradation of the C₃₀-hydroxylactone, II, 31.
- and Johnson, W. S., 8-methyl-1:2-benzanthracene, II, 104. Syntheses in the 1:2-benzanthracene and chrysene series, II, 412.
- and Jones, R. N., ultra-violet absorption spectrum of anhydrosarsapogenoic acid, I, 178.
- and Joshel, L. M., methyl homologues of triphenylene, II, 540.
- Joshel, L. M., and Seligman, A. M., synthetic experiments in the chrysene series, II, 499.
- and Kilmer, G. W., 9-methyl-1:2:5:6-dibenzanthracene, II, 254.
- and Seligman, A. M., syntheses of meso-substituted 1:2-benzanthracene derivatives, II, 104.
- and Thompson, H. T., oxidation-reduction potentials of substituted quinoneanils and indoanilines, II, 167.
- Fieser, (Mrs.) M. See Fieser, L. F.
- Fiessinger, C., prophylactic use of digitalis, III, 777.
- Fife, J. M., effect of sodium citrate on release of curly-top virus from alcohol precipitate of plant juice, III, 530.
- Figge, F. H. J., melanin: a natural reversible oxidation-reduction system and indicator, III, 1095.
- Figueiredo, A. See Martins, T.
- Figura, V., micro-determination of homogentisic acid in urine, III, 1060.
- Figurovski, N. A., colorimetric determination of small amounts of platinum in nitric acid and other products, I, 102. Determination of distribution of poresizes in a porous body, I, 224. Kinetics of the mutual displacement of liquids from the pores of a porous body, and a characteristic of porosity. I. Mutual displacement of liquids in the absence of a meniscus, I, 468.
- Fijałkowski, C. See Kaliński, T. J.
- Fikentscher, R., hyperemesis gravidarum, III, 757.
- Filachione, E. M., synthesis of acetals of chloro- and bromo-acetaldehyde, II, 406.
- See also Hurd, C. D.
- Filaretov, A. N. See Prokopetz, E. I.
- Filatov, V. P., corneal grafting for keratitis and skin grafting in treatment of skin diseases, III, 574.
- Fildes, P., and Gladstone, G. P., glutamine and growth of bacteria, III, 1103.
- See also McIlwain, H.
- Filimonov, M. P. See Berkenheim, A. M.
- Filipova, N. E. See Martshuk, P. D.
- Filipovic, P. See Tomiček, O.
- Filippi, A. See Roche, J.
- Filippini, G., production of ileac spasm, III, 843.
- Filippon, S., and Bellini, L., intestinal absorption of fats in the phloridzinized dog, III, 64.
- See also Bellini, L.
- Filippov, A. N., fluorescence of solutions of salts of cerium, I, 123.
- See also Seidel, A.
- Filippov, M. See Rabinerson, A.
- Filippov, M. V., biological detectors for the spectral analysis of rays emitted by rock-salt after irradiation with X-rays, I, 596.
- Filippov, S. See Kabanov, B.
- Filippova, L. A. See Smorodincev, I. A.
- Filippovitch, P. S. See Monblanova, V. F.
- Filogamo, G., structure of bronchial cartilage, III, 544.
- Filomeni, M., effect of β -phenylisopropylamine on gaseous exchange, III, 184.
- Filzer, P., light intensity and dry-matter production in plant communities, III, 949.
- Finbak, C., scattering of X-rays by a system of rotating molecules, I, 129. Determination of the molecular structure of gases by electron diffraction, I, 130. Thermodynamic theory of phase transformations, I, 187.
- Finch, G., hunger as a determinant of conditional and unconditional salivary response magnitude, III, 33. Salivary conditioning in atropinized dogs, III, 269. Pilocarpine conditioning [of salivary gland secretion], III, 386.
- Finch, G. I., study of surfaces by electron diffraction, I, 245.
- See also Charlesby, A.
- Finch, J. W., aetiology of nausea and vomiting of pregnancy, III, 143.
- Fincke, M. L., and Garrison, E. A., utilisation of calcium of spinach and kale, III, 409.
- Findlay, G. M., virus diseases, III, 432.
- and MacCallum, F. O., epidemiology of yellow fever, III, 529.
- MacCallum, F. O., and Murgatroyd, F., aetiology of infective hepatitis (epidemic catarrhal jaundice), III, 529.
- Mackenzie, R. D., MacCallum, F. O., and Klienberger, E., aetiology of polyarthritis in rat, III, 1102.
- See also MacCallum, F. O., and Stannus, H. S.
- Findlay, J. C., Pitt, A., Smith, H. G., and Wilhelm, J. O., velocity of sound in liquid helium under pressure, I, 514.
- Findley, T., jun., excretion of endogenous "creatinine" by the human kidney, III, 152.
- See also White, Harvey L.
- Fine, J. See Gettler, A. O., and Rosenfeld, L.
- Fine, P. C., normal modes of vibration of a body-centred cubic lattice, I, 551.
- Fineberg, M. H., mercurial diuretics in cardiac failure, III, 862.
- Fineman, G., development of chondrocranium of chameleon, III, 956.
- Fineman, M. Z. See Kharasch, M. S.
- Finesinger, J. E. See Lindemann, E.
- Finger, G. C. See Adams, R.
- Fingert, H. See Bowman, K. M.
- Fini, M., contraction of the spleen and blood changes due to β -phenylisopropylamine, III, 508.
- Finjels, L. A., dangers and emergencies of insulin therapy of the psychoses, III, 250.
- Fink, A. See Zettel, H.
- Fink, H., and Just, F., biochemistry of *Torula utilis*. II. Composition of yeast substance, especially yeast-protein, III, 325.
- and Krebs, J., production of yeast. I. III. Cultivation of yeast in simple carbon compounds. IV. Repeated propagation with simple compounds as sources of carbon. V. Relationship between [production of] carbon dioxide and yield of yeast. VI. [State of combination of] nitrogen in the substrate after fermentation. VII. Yields of yeast obtained in standard experiments, III, 99, 325, 521, 969.

- Fink, *H.*, Lechner, *R.*, and Krebs, *J.*, production of yeast. II. Apparatus for propagating yeast by the aeration method under standardised conditions, III, 99. Theory of yeast production and of maximum yield of yeast, III, 789.
See also Burger, *A. L.*
- Fink, *K.*, coincidence investigations of the nuclear transformation of boron by protons, I, 294.
- Fink, *W. L.*, and Willey, *L. A.*, equilibrium relations in aluminium-zirconium alloys of high purity, I, 193.
- Finkel, *J.* See Worrall, *D. E.*
- Finkelschtein, *D. N.*, micro-analysis of aerosols. III. Determination of selenium dioxide, I, 96.
and Elenewitsch, *L. P.*, nephelometric and colorimetric determination of vanadium by means of cupferron, I, 42.
- Finkelstein, *J.*, and Elderfield, *R. C.*, pyridine series. I. Improved synthesis of 2:3-dimethylpyridine and conversion of the latter into an analogue of thiamine, II, 560.
- Finland, *M.*, and Brown, *J. W.*, specific treatment of pneumococcus type I pneumonia, III, 611. Specific treatment of pneumococcus type V and type VII pneumonias, III, 775. Immunological studies in patients with pneumococcus type III pneumonia treated with sulphanilamide and serum, III, 998.
- Spring, *W. C.*, Lowell, *F. C.*, and Brown, *J. W.*, therapy of pneumococcal pneumonia, III, 775.
See also Brown, *J. W.*
- Finlayson, *H. H.* See Bose, *P. K.*
- Finlayson, *M. H.* See Shapiro, *H. A.*
- Finley, *O. B.*, temperature and frog's dorsal root potentials, III, 828.
See also Dun, *F.*
- Finley, *K. H.* See Adler, *A.*
- Finn, *A. N.* See Hubbard, *D.*
- Finn, *M.* See Getz, *H. R.*
- Finner, *L. L.*, and Calvery, *H. O.*, pathological changes in rats and in dogs fed diets containing lead and arsenic compounds, III, 615.
- Finnerud, *C. W.* See Sulzberger, *M. B.*
- Finsterer, *H.*, influence of anaesthesia on course of laparotomy, III, 714.
- Fiori, *E.* See Peragallo, *I.*
- Firestone, *F. A.* See Randall, *H. M.*
- Firmenich, *G.* See Ruzicka, *L.*
- Firor, *W. M.* See Abel, *J. J.*
- First, *M. W.* See Bradley, *W. R.*
- Fischbeck, *K.*, and Eimer, *F.*, behaviour of the antimony electrode in p_H measurements, I, 94.
and Spingler, *H.*, thermal decomposition of ammonium chromates, I, 376.
- Fischer, *Albert*, action of heparin on growth of tissue cells *in vitro*, III, 117.
and Astrup, *T.*, thrombin in tissue culture, III, 809.
and Davidsohn, *F.*, present condition of a twelve-year old pure strain of carcinoma cells *in vitro*, III, 490.
See also Herrmann, *Heinz*.
- Fischer, *A. E.* See Kohn, *J. L.*
- Fischer, *D. J.* See Hoagland, *C. L.*
- Fischer, *E.*, effect of molecular structure on dielectric relaxation, I, 127.
and Frank, *F. C.*, dielectric relaxation of molecules with dipole groups capable of free rotation, I, 302.
- Fischer, *E.*, and Rogowski, *F.*, dipole moments, especially of anthraquinone derivatives, with reference to the inner molecular induction effect, I, 303.
See also Budó, *A.*
- Fischer, *F. G.*, Roedig, *A.*, and Rauch, *K.*, fumarate dehydrogenase, a yellow pigment, III, 623.
- Fischer, *F. P.*, water metabolism of the eye and its parts, III, 834.
See also Doesschate, *G. ten*, and Noyons, *A. K. M.*
- Fischer, *H.*, adrenaline determination, III, 139.
- Fischer, *Hans*, dualism of blood pigment, III, 650.
and Conrad, *M.*, chlorophyll. LXXXVII. Partial oxidation of chlorophyll derivatives, II, 287.
and Elhardt, *E.*, porphyrins. XLIII. Chemistry of pyrrole, II, 185.
Guggemos, *H.*, and Schäfer, *A.*, imidoporphyrins. VI. 2-Methyl-3:4-diethyl- and 3:4-diethyl-pyrrole; Curtius degradation of Et 2-methyl-3:4-diethyl-pyrrole-5-carboxylate, II, 444.
and Libowitzky, *H.*, bile pigments. XXVI. Stercobilin, II, 393.
Mittenzwei, *H.*, and Oestreicher, *A.*, protochlorophyll and vinylphæoporphyrin- a_2 , II, 186.
Oestreicher, *A.*, and Albert, *Adolf*, chlorophyll. LXXXVI. Acetyl rhodin g_2 and vinylporphyrins, II, 287.
and Reinecke, *H.*, bile pigments. XXII. Synthesis of vinyl-substituted bilirubin derivatives. XXIV. Hydroxynitrovinylpyrromethenes and urobilinoid pigments. XXV. Tripvrenes, II, 229, 392, 393.
Reinecke, *H.*, and Lichtenwald, *H.*, bile pigments. XXI. Aminohydroxypyrromethenes; pentduopent reaction, II, 186.
and Schroder, *C. G.*, chlorophyll. LXXXV. Constitution of the verdins and synthetic rhodins, II, 230.
and Stachel, *A.*, bile pigments. XXIII. Dimethoxy- and dihalogeno-dipyrromethenes and their reactions, II, 229.
and Strell, *M.*, neopurpurins, II, 288.
and Wenderoth, *H.*, chlorophylls. LXXXIV. Chlorophyll, II, 128.
See also Endermann, *F.*
- Fischer, *Hermann*, behaviour of Golgi apparatus of renal tubule cells with varying renal activity, III, 150. Migration of nitrogen in higher plants, III, 1017.
- Fischer, *H. A.* See Goldstein, *H.*
- Fischer, *H. O. L.* See Baer, *E.*
- Fischer, *I.*, differentiation of lipophores and melanophores in ectoderm explants of *Amblystoma*, III, 348.
and Gottschewski, *G.*, tissue culture with *Drosophila*, III, 1024.
See also Gottschewski, *G.*
- Fischer, *Johannes*, determination of the thermal conductivity and temperature conductivity from the adjustment method with the Schleiermacher tube and the plate apparatus, I, 339.
- Fischer, *M. B.* See Beland, *I. L.*
- Fischer, *M. H.*, and Suer, *W. J.*, base-protein-acid compounds prepared from fibrin, III, 743. Fibrin as catalase, III, 743. Casein as catalase, III, 743.
- Fischer, *R.*, and Toth, *D.*, synthetic substances with saponin-like action, III, 932.
- Fischer, *Robert*, detection of ammonia, calcium, and strontium with organic nitro-compounds, I, 384. Micro-determination of veronal in blood and fluid, III, 539.
- Fischer, *W.*, and Gewehr, *R.*, thermal properties of halides. XIII. Saturation pressures of stannous halides, I, 603.
Gewehr, *R.*, and Wingchen, *H.*, thermal properties of halides. XII. Measurement of vapour pressure, and the m.p. and saturation pressures of scandium, thorium, and hafnium halides, I, 603.
- Fischer, *W. von*. See Kolthoff, *I. M.*
- Fischer, *W. H.* See Miescher, *K.*
- Fischer-Colbrie, *E.*, atomic disintegration experiments with radium-B + -C as a source of radiation. II. Nitrogen, I, 504.
- Fischgold, *H.* See Baudouin, *A.*
- Fischler, *F.*, prophylaxis of goitre, III, 267.
- Fischnich, *O.*, significance of growth-substance in production of adventitious root and shoot formation, III, 882.
See also Laibach, *F.*
- Fish, *M.* See Madison, *R. R.*
- Fishback, *D. B.*, new instrument for testing condition of myocardium at autopsy (myocardiometer), III, 557.
See also Bernstein, *M.*
- Fishback, *H. R.*, and Gregersen, *A.*, permanent method for labelling microscopic slides, III, 958.
- Fishbein, *W. J.* See Bundesen, *H. N.*
- Fishburn, *A. G.*, and Watson, *H. B.*, [tri]-chloro[*iso*]butanol, II, 491.
- Fisher, *A. M.*, and Scott, *D. A.*, ash content of nickel-insulin crystals, III, 50.
See also Scott, *D. A.*
- Fisher, *C.*, Magoun, *H. W.*, and Ranson, *S. W.*, dystocia in diabetes insipidus; relation of pituitary oxytocin to parturition, III, 49.
See also Magoun, *H. W.*
- Fisher, *C. H.* See Fuson, *R. C.*
- Fisher, *G. E.*, sulphanilamide in treatment of otitis media, III, 857.
- Fisher, *G. T.* See Ingle, *D. J.*
- Fisher, *H. E.*, and Clark, *R. H.*, conversion of 1- into 2-bromonaphthalene, II, 538.
- Fisher, *J. A.*, and Gilmour, *J. R.*, encephalomyelitis following sulphanilamide, III, 1084.
- Fisher, *J. R.*, continuous still for production of metal-free water, I, 106.
- Fisher, *M. S.*, gold, pyrite, and carbon in the Rand banket, I, 435.
- Fisher, *N. H.*, ore geology of the Day Dawn mine, New Guinea, I, 499.
- Fisher, *O. E.*, severe night blindness due to vitamin-A deficiency, III, 73.
- Fisher, *P. Z.*, effect of a non-conducting admixture of Sb₂S₃ on the conductivity of solid Ag₂S, I, 28.
and Koval, *T. E.*, "difference effect" of amalgams, I, 17.
- Fisher, *R. A.*, and Peck, *E. R.*, hyperfine structure of Mn I and nuclear magnetic moment, I, 166.
See also Fry, *A. S.*
- Fisher, *R. B.* See Davenport, *H. W.*
- Fisher, *R. S.* See Peabody, *W. A.*
- Fisher, *S.* See Shannon, *J. A.*
- Fisher, *W. C.*, and Mackay, *C. A.*, surface tension of dilute solutions, I, 74.
- Fishman, *W. H.*, β -glycuronidase. I. Preparation and purification, III, 423.

- Fishof, F. E., treatment of vasomotor rhinitis and allied conditions with sodium morrhuate, III, 180.
- Fisk, J. B. See Hill, A. G., and Maurer, W.
- Fiske, V. M., effects of light and darkness on activity of pituitary of rat, III, 906.
- See also Fevold, H. L.
- Fitch, H. M. See Small, L.
- Fitzgerald, E. M. See Kemp, J. E.
- Fitzgerald, G. A. See Stansby, M. E.
- Fitzgerald, J. E., and Webster, A., hyperemesis gravidarum, III, 382.
- Fitzgerald, O., effect of nicotinamido on experimental pellagra in dogs, III, 921.
- Fitzgibbon, J. P. See Nathanson, M. H.
- Fitzhugh, J. R. See Gilliland, E. R.
- Fitzhugh, O. G., liver regeneration in rats protected with xanthine against carbon tetrachloride poisoning, III, 843.
- See also Robbins, B. H., and Stoughton, R. W.
- Fitz-Hugh, T., jun., sensitivity reactions of blood and bone marrow to drugs, III, 226.
- See also Creskoff, A. J.
- Fitzpatrick, C. P. See Bennett, B. T., jun.
- Flach, A. See Palisa, C.
- Flaherty, J. A. See Strecker, E. A.
- Flaks, J., and Ber, A., application of the antagonodotropic action of human urine to the diagnosis of cancer, III, 492.
- Himmel, I., and Zotnik, A., haemopoietic hormone in the hypophysis producing polycythemia, III, 136.
- Flamand, J., proteolysis of fish tissue by muscle enzymes present therein, III, 198.
- Flamiani, G., and Ferrich, M., gravimetric determination of aluminium, I, 578.
- Flamm, G. See Gelfand, H. H.
- Flammersfeld, A., lower limit of the continuous β -spectrum of radium-E, I, 442.
- Flanders, S. See Melchionna, R. H.
- Flarer, F., treatment of leishmaniasis, III, 82.
- Flaschentrager, B., and Bernhard, K., [biological] degradation of the monoanilides of adipic and sebacic acids, III, 175.
- Flatt, R., and Hess, W., potassium uranates, I, 92.
- Flaum, G., insulin-insensitivity: its possible relation to the pituitary gland, III, 50.
- Retention of lipiodol in the lungs, III, 93.
- and Stueck, G. H., haemochromatosis, III, 551.
- Flavier, H., evolution of vitamin-B₁ and -B₂ during ripening of grapes and during alcoholic fermentation, III, 602.
- and Genevois, L., determination of vitamin-B₁ and -B₂ in plant tissues, III, 602.
- Flaxman, N. See Volini, I. F.
- Fleck, E. E., and Palkin, S., dihydroabietic acids from so-called pyroabietic acids, II, 30.
- Composition of the so-called pyroabietic acid prepared without a catalyst, II, 172.
- Presence of dihydroabietic acid in pine oleoresin and rosin, III, 803.
- Fleck, L., reactions, pseudo-reactions, and complement protection, III, 435.
- Fleisch, A., antirachitic vitamin of irradiated milk, III, 497.
- and Weger, P., nutritive tissue sensitivity as basis for activity hyperemia, III, 458.
- See also Domenjoz, R.
- Fleischer, G., Schwenk, E., and Meyer, Karl, nature of gonadotropic hormone from pregnant mare serum, III, 137.
- Fleisher, M. S., and Rieh, G. T., mononuclear leucocytes in blood of guinea-pigs experimentally infected with pneumococcus, III, 1027.
- Protective antibody in guinea-pigs recovering from experimental pneumococcus infection, III, 1102.
- Fleischer, W. L., air conditioning with particular attention to effective temperature, III, 94.
- Fleischhacker, H. H., brain phosphatases, III, 251.
- Determination of alkaline phosphatase in cerebrospinal fluid, III, 724.
- Fleischmann, F., and Schwarz, L., enzyme reactions in the cell and in solution. I. Influence of alkali ions on dehydrogenation processes in the yeast cell, III, 516.
- Fleischmann, L., generalised formula for the Doppler effect, I, 548.
- Fleischmann, O. See Reindel, F.
- Fleischmann, R., composition of cadmium radiation excited by slow neutrons, I, 115.
- Fleischmann, W., comparative physiology of cell metabolism, III, 295.
- Fleishman, A. See Orgel, M. N.
- Flemberg, H., photographs of the short-wave optical spectral lines with a bent crystal as grating, I, 229.
- Fleming, Alexander, recent advances in vaccine therapy, III, 1106.
- See also Maclean, I. H.
- Fleming, (Sir) Ambrose, new method of creating electrification, I, 307.
- Fleming, J. D. See Carswell, T. S.
- Fleming, T. See Yntema, L. F.
- Fleuder, E. See Lecoq, R.
- Fletcher, H. H., and Taylor, T. C., action of chlorine water on β -amyloses, II, 51.
- Fletcher, J. P., and Waters, E. T., utilisation of various metabolites (blood-fat and lactate, cardiac and lung-glycogen) in aglycaemic heart-lung preparation, III, 298.
- Fletcher, W., therapeutic efficacy of totaquina in human malaria. II, III, 83.
- Fletcher, W. P. See Bates, L. F.
- Fleury, P., use of periodate in volumetric determination of polyhydric alcohols and reducing aldoses, and the determination of periodate and iodate; use of periodate in the volumetric determination of ketoses, II, 195.
- and Boisson, R., action of periodic acid on acetone and diethyl ketone, II, 299.
- Effect of periodic acid on lactic acid and its degradation products (acetaldehyde, methyl alcohol, formaldehyde, formic acid), II, 532.
- and Carbon, J., determination of acetone in urine with the micro-Schlesinger apparatus, III, 596.
- and Courtois, J., chemical and biochemical hydrolysis of diose phosphate; analytical applications, II, 467.
- Flexner, J., and Wright, I. S., autonomic drugs and the biliary system. II. Changes in liver secretion and their relation to alterations in respiration, arterial pressure, and portal pressure produced by acetyl- β -methylcholine chloride (mecholy), adrenaline, and related compounds, III, 860.
- Flexner, L. B., chemistry and nature of cerebrospinal fluid [C.S.F.] during foetal life, III, 253.
- and Stiehler, R. D., oxidation-reduction processes in the foetal choroid plexus, III, 253.
- See also Stiehler, R. D.
- Flexner, M., and Schneider, B., subarachnoid haemorrhage after adrenaline, III, 261.
- Flickinger, D. See Burwell, C. S.
- Flickinger, E. See Freudenberg, K.
- Flinn, R. H., Dreesen, W. C., Edwards, T. I., Riley, E. C., Bloomfield, J. J., Sayers, R. R., Cadden, J. F., and Rothman, S. C., silicosis and lead poisoning among pottery workers, III, 782.
- Flint, E. A., phytoplankton in Lake Sarah (New Zealand), III, 210.
- Flint, E. P., McMurdie, H. F., and Wells, L. S., formation of hydrated calcium silicates at elevated temperatures and pressures, I, 154.
- Flippin, H. F., use of sulphapyridine (M. & B. 693) in treatment of pneumonia, III, 774.
- Lockwood, J. S., Pepper, D. S., and Schwartz, L., treatment of pneumococcal pneumonia with sulphapyridine, III, 611.
- and Pepper, D. S., use of 2-p-aminobenzenesulphonamidopyridine in treatment of pneumonia, III, 305.
- Floch, H. See Cotoni, L.
- Flock, E. V., Corwin, W. C., and Bollman, J. L., sustained hyperlipaemia of dietary origin in the dog, III, 13.
- Hester, H. R., and Bollman, J. L., phospholipin changes during the production of fatty livers in geese, III, 608.
- Ingle, D. J., and Bollman, J. L., formation of lactic acid, an initial process in working muscle, III, 855.
- See also Bollman, J. L., and Kendall, E. C.
- Floderer, I. See Schulek, E.
- Flodin, N. W. See Schlesinger, H. I.
- Flood, C. A. See St. John, F. B.
- Flood, H., motion of molecules at phase boundaries, I, 368.
- and Sletten, E., evaluation of the argentometric-potentiometric titration curves of bromide-chloride mixtures, I, 95.
- and Tronstad, L., heat of formation of heavy water, I, 201.
- and Wergeland, H., determination of interfacial tension by measurement of equilibrium rotation surfaces, I, 434.
- Florence, G., and Drilhon, A., mounting for the antimony electrode, I, 538.
- Drilhon, A., and Dien-Siang, W., action of ultra-violet light on proteins. I. Indole ring, II, 234.
- See also Chanzov, M., and Drilhon, A.
- Florence, R. T., and Harkins, W. D., molecular interaction in mixed monolayers on aqueous subsolutions. II. Unstable mixtures with unsaturated acids, I, 73.
- See also Harkins, W. D.
- Florentin, D., alimentary toxemias of bacterial origin, particularly those of cheese, III, 338.
- Florentin, P., and Binder, C., sebaceous metaplasia in the mammary gland following oestrone treatment, III, 586.
- and Grognot, P., structural changes in the liver of depancreatised dogs treated with insulin alone or with vagotonin, III, 593.

- Florescu, N. A., axial magnetic permeability of wires and thin layers of iron at high frequencies, I, 459.
- Florey, H. W., Jennings, M. A., Jennings, D. A., and O'Connor, R. C., reactions of intestine of pig to gastric juice, III, 842.
- See also Ebert, R. H., Goodfriend, J., and Wright, R. D.
- Floriana, L., pharmacology of *Cissampelos pareira*, L., var. *J. Gardneri*, Diels, III, 85.
- Florinski, F. S. See Kobeko, P. P.
- Florkin, M., osmotic regulation in invertebrates in fresh water, III, 68.
- and Bosson, G., biochemical submicroanalysis. I. Blood-sugar. II. Allantoic acid, III, 886.
- Flory, P. J., intramolecular reaction between neighbouring substituents of vinyl polymerides, II, 401.
- Flosdorf, E. W., Kimball, A. C., and Chambers, L. A., *H. pertussis*. I. Liberation by sonic vibration of soluble component that absorbs phase I agglutinin, III, 1101.
- Flu, P. C., magnesium ion and lysis of *Bac. megatherium* by antimegatherium bacteriophage, III, 525.
- Fluck, L. A. See Foster, L. S.
- Fluck, W. Z. See Ruf, H. W.
- Flügel, F. E., drug action in states of psychological depression, III, 83.
- Flügge, S., retardation of neutrons in hydrogen-containing substances, I, 3.
- Nuclear isomerism, I, 447. Can technical use be made of the energy of the atomic nucleus? I, 447.
- and Droste, G. von, energy considerations of the origin of barium by the neutron bombardment of uranium, I, 235.
- and Zimens, K. E., determination of particle size and diffusion constants from emanation properties; (theory of the emanation method), I, 274.
- See also Cremer, E., and Hahn, O.
- Fluhmman, C. F., endocrine theories of dysmenorrhoea, III, 59. Comparative studies of gonadotropic hormones. 6. Effects of long-continued daily injections, III, 973.
- Flume, E. See Rheinboldt, H.
- Flumiani, G., and Bajić, V., synthesis of hydroxyanthraquinone salts. II. Action of aqueous solutions of inorganic salts on hydroxyanthraquinones, II, 433.
- Flury, F., chemistry and toxicology of [vapours of] solvents, III, 617.
- Flynn, C. S. See Hac, L. R.
- Flynn, J. E. See Scanlon, G. H.
- Foa, P., effect of spleen on hepatic formation of substances stimulating haemopoiesis, III, 389. Influence of spleen on haematopoietic function of liver, III, 816.
- and Fornaroli, P., effect of various intermediate products of carbohydrate metabolism on capacity for work on iodoacetate-poisoned muscle, III, 80.
- Excretion of creatine and creatinine by rice-workers, III, 406. Pyruvic acid and methylglyoxal as intermediates in carbohydrate oxidation, III, 998.
- Utilisation of lactate, pyruvate, and methylglyoxal by depancreatized dogs, III, 998.
- See also Fornaroli, P., and Margaria, F.
- Fodor, A. R. See Posner, J. L.
- Folling, A., Gloss, K., and Gammes, T., effect on man and animals of overdoses of phenylalanine, III, 79.
- Foerster, H. R., compensation laws and related medicolegal considerations, III, 315.
- and Schwartz, L., occupational melanosis from pitch, III, 1094.
- Forster, P., light absorption of hydrocarbons on the basis of quantum mechanics, I, 118. Reciprocal influence of valency in the carbon atom, I, 358. Colour and constitution of organic compounds from the viewpoint of modern physical theory, II, 399.
- See also Hoyer, H.
- Forsterling, K. See Strack, E.
- Foëx, G., constant paramagnetism of quadrivalent cerium and of other ions possessing the same number of electrons as the rare gases, I, 247.
- and Graff, (Mlle.) M., experimental study of cases of paramagnetism, I, 514.
- Foëx, M., influence of tempering on density of borate-soda glasses, I, 137. Tempering of borate-soda glasses, I, 412. Solubilities and separations in glasses, I, 426.
- Föyn, E., Gleditsch, E., and Hanneborg, S., investigation of radium and barium precipitations using thorium-X as indicator, I, 32.
- Karlik, B., and Pettersson, H., and Rona, E., radioactivity of sea-water, I, 283.
- Foffani, G., period for attainment of equilibrium of acetylene in alveolar air and blood and the determination of cardiac output, III, 18.
- Fog, M., relationship between blood pressure and tonic regulation of the pial arteries, III, 22. Depth and nerve cell content of the supragranular cortex in normal and mentally defective persons, III, 33.
- Fogelson, L. I., collapse in internal diseases [and circulating blood volume], III, 364.
- Fogelson, S. J. See Bachrach, W. H.
- Fogg, L. C., and Warren, S., cytoplasmic changes induced in the Walker rat carcinoma 256 by X-radiation of different intensities, III, 159.
- Foglia, V. G., vital importance of lymphatic hearts in the toad, III, 897.
- and Gerschman, R., circulatory and humoral alterations produced by destruction of the lymphatic hearts of the toad, III, 897.
- See also Selye, H.
- Fogy, W. See Rumpf, E.
- Fokker, A. D., fundamental relations of thermomagnetism, I, 507.
- Folch, J., and Van Slyke, D. D., nitrogenous contaminants in petroleum ether extracts of plasma lipins, III, 961.
- Foley, E. F. See Kendrick, A. B.
- Foley, F. C., and West, P. W., detection of fluorine in minerals, I, 534.
- Foley, J. O., differential counterstain for toned sections of pyridine-silver preparations of peripheral nerves, III, 226.
- Folkers, K., and Koniuszy, F., *Erythrina* alkaloids. III. Isolation and characterisation of a new alkaloid, erythramine, II, 349.
- and Unna, K., chazuta curare and allied plants, III, 935.
- See also Harris, S. A.
- Folkins, H. O. See Steacie, E. W. R.
- Follett, D. H., comparison of cosmic-ray showers underground and at sea level, I, 446.
- Folley, S. J., interactions of oestron and prolactin and effect of oestron on the pigeon crop-gland response, III, 755.
- Guthkelch, A. N., and Zuckerman, S., mammary gland of rhesus monkey under normal and experimental conditions, III, 481.
- and Young, F. G., effect of anterior pituitary extracts on established lactation in the cow, III, 48. Effect of continued treatment with anterior pituitary extracts on milk volume and milk-fat production in the lactating cow, III, 474.
- See also Bacsich, P., and Bottomley, A. C.
- Follmann, spontaneous regression of tumours, III, 160.
- Folsome, C. See Freyberg, R. H.
- Fonda, G. R., characteristics of silicate phosphors, I, 355.
- Fong, J. See Rowe, A. H.
- Fontaine, M. See Randoin, L.
- Fontaine, R., Guillemet, R., Mandel, P., and Branzau, P., nitrogen excretion in experimental, intestinal occlusion in the dog, III, 388. Changes in urinary purine excretion following experimental intestinal occlusion, III, 1076.
- See also Hoerner, G.
- Fontaine, T. D. See Olcott, H. S.
- Fontana, C. M. See Garrett, A. B.
- Fonteyne, R., dipole moment, Raman spectrum, and structure of chlorine heptoxide, I, 10. Raman spectrum of deuterium perchlorate, I, 179. Raman spectrum and structure of chloric, bromic, and iodic acids, I, 403.
- Foot, A. S., Henry, K. M., Kon, S. K., and Mackintosh, J., pig-feeding experiments with cod-liver oil, III, 701.
- Foot, J. J., and Graffin, A. L., measurements of fat-laden and fat-free segments of proximal tubule in nephron of cat and dog, III, 739.
- See also Graffin, A. L.
- Forbes, A., and Morison, B. R., cortical response to sensory stimulation under deep barbiturate narcosis, III, 669.
- See also Beecher, H. K.
- Forbes, E. B., satisfactory substitute for soda-lime in respiration calorimetry, III, 804.
- Forbes, G., case of congenital clubhand with a review of the aetiology of the condition, III, 223.
- Forbes, G. S., and Cline, J. E., photolysis and extinction coefficients of gaseous carbonyl sulphide, I, 153.
- See also Bent, H. E., and Cline, J. E.
- Forbes, H. S., Schmidt, C. F., and Nason, G. I., evidence of vasodilator innervation in parietal cortex of the cat, III, 659.
- Forbes, I. A. See Percival, E. G. V.
- Forbes, J. C., prevention of liver cirrhosis by the subcutaneous injections of xanthine-containing preparations, III, 511.
- See also McConnell, J. S.
- Forbes, J. R. See Coxon, R. V.
- Forbes, T. R., action of testosterone on accessory sex structures of recently hatched female alligators, III, 589.
- Forbes, W. H. See Keys, A.
- Forbush, S. E., world-wide changes in cosmic-ray intensity, I, 116.
- Forche, H. E., simplification of polarographic methods by the introduction of step-quotients, I, 218.

- Forconi, A., importance of splenic and bone-marrow punctures in sub- and a-leukemic myelosis, III, 549.
- Ford, C. B. See Greenburg, L.
- Ford, G. M. See Gilman, H.
- Ford, T. F., and Wilson, D. A., structure of the surfaces of solutions as shown by their resistance to the spreading of insoluble films, I, 22.
- Ford, W. H. See Richdori, L. F.
- Ford, W. L. See Gucker, F. T., jun.
- Fordham, S., and Khalsa, R. G., single-crystal palladium films and their interaction with gases, I, 243.
- Fordyce, R., and Hibbert, H., reactions relating to carbohydrates and polysaccharides. LVII. Synthesis of 90-membered and 186-membered oxyethylene glycols. LVIII. Relation between chain length and viscosity of polyoxyethylene glycols, II, 402.
- Lovell, E. L., and Hibbert, H., reactions relating to carbohydrates and polysaccharides. LVI. Synthesis of higher polyoxyethylene glycols, II, 402.
- Forester, G. O. See Tolansky, S.
- Forestier, H., and Longuet, (Mlle.) J., formation of copper ferrite at low temperature, I, 482.
- and Vetter, (Mlle.) M., systems nickel ferrite-magnesium ferrite, nickel ferrite-copper ferrite, and nickel ferrite-zinc ferrite, I, 464.
- Forjaz, A. P., influence of electromagnetic waves on the course of chemical reactions, I, 209.
- Forkner, C. E. See Ch'u, Y.
- Forman, J., positive beam in cathode-ray tubes, I, 348. Extremely bright spots on a Coolidge tube target, I, 590.
- Forman, S. E. See Carr, C. J., and Krantz, J. C., jun.
- Formwalt, J. M. See Constant, F. W.
- Fornaroli, P., blood elements and erythropoiesis during muscular dyspnoea, III, 446. Utilisation of methylglyoxal and pyruvic acid in the normal organism; pyruvic acid as intermediate product in carbohydrate metabolism, III, 998.
- and Foà, P., deficiency of contraction in iodoacetate-poisoned muscle perfused with methylglyoxal or pyruvic acid, III, 80.
- See also Capraro, V., Foà, P., and Margaria, R.
- Foroud, A., and Justi, E., electrical resistance of single molybdenum crystals under the action of strong transverse and longitudinal magnetic fields, I, 513.
- Forrer, R., orbital electronic network of several elements, I, 6. Different magnetic substances from FeOOH , I, 37. Electronic network in compounds of multiple ionisation, I, 63. Activation and composition of the elementary moment in ferromagnetic alloys, I, 70. Resolution of the elementary moment of ferromagnetic substances and gyro-magnetic phenomena, I, 131. Relations between the Curie point, the orbital moment, and the crystal lattice, I, 194. Magnetic moment in ferromagnetic alloys. I. Activation and the elementary moment, I, 298.
- Forrest, J. W., improved density comparator, I, 491.
- Forró, M. See Barnóthy, J.
- Forsham, P. H. See Barcroft, J.
- Forsman, N. See Euler, H. von.
- Forssman, S. See Mollerstrom, J.
- Forst, A. W., apparatus for measuring sedative effects, III, 185. Effect of morphine and dihydrodeoxymorphine on motility, III, 932.
- and Kanda, Z., action of alkaloids from solanaceous plants and of their derivatives, III, 930.
- Forst, P. von der. See Schenck, R.
- Forster, A. C. See Maisson, G. L.
- Forster, R. P., use of inulin and creatinine as glomerular filtrate measuring substances in the frog, III, 152.
- Forster, W. S. See Aston, J. G.
- Forstmeier, W. M., permeability of blood-cerebrospinal fluid barrier in schizophrenia and influence of insulin shock therapy, III, 131.
- Fort, M., and Morávek, V., abnormal crystallisation of salts from serum of normal persons and of cancer patients, III, 121.
- Fortess, F. E. See Freed, S.
- Forti, C., hyperinsulinemia by injection of the hormone, III, 140.
- Fortier, A., viscosity of air and the electronic charge, I, 191.
- Fortin, E. P., is the sight of birds better than man's? III, 1041.
- Fortune, W. B. [with Mellon, M. G.], spectrophotometric study of neutralisation indicators, I, 16.
- Fortunesco, A., total base in serum and urine of dog, horse, and ox, III, 963.
- Fortunescu, C. See Paulian, D.
- Fortuyn, J. D., systematic arrangements of fibres in the internal capsule, thalamus, and pes pedunculi, III, 668.
- Forziati, A. F. See Bent, H. E.
- Fosbinder, R. J., and Walter, L. A., sulphanilamido-derivatives of heterocyclic amines, II, 525.
- See also Walter, L. A.
- Foschini, A., and Talenti, M., determination of formaldehyde. I. Hydrogen peroxide method, III, 463.
- Foshag, W. F., sodium hydrogen carbonate from Searles Lake, California, I, 342.
- See also Gale, W. A.
- Foshay, L., and Hagebusch, O. E., histaminase in treatment of serum sickness, III, 818.
- Foss, G. L., percutaneous absorption of male hormone, III, 142. Clinical administration of androgens, III, 590. Methyltestosterone by mouth, III, 1057.
- and Phillips, P., suppression of lactation by oral oestrogen therapy, III, 57.
- Foss, N. E., Stehle, J. J., Shusett, H. M., and Hadburg, D., unsymmetrical aryl sulphides, II, 17.
- Fossati, C., sedimentation rate of red blood corpuscles in lung tuberculosis, III, 351.
- Fosse, R., ureogenesis and the metabolism of purine-nitrogen in plants, III, 635.
- Foster, D. P., and Lowrie, W. L., diabetes mellitus associated with hyperthyroidism, III, 261.
- Foster, F. P., excretion of sulphanilamide in breast milk, III, 610.
- See also Bannick, E. G.
- Foster, G. L. See Bovarnick, M., and Schoenheimer, R.
- Foster, G. S., effects of excessive physical exertion on kidneys, III, 759.
- Foster, J. S., Jones, D. C., and Neamtan, S. M., Stark effect in the HD and D_2 spectra, I, 49.
- Foster, J. S., and Pounder, E. R., effect of crossed electric and magnetic fields on the helium spectrum, I, 49.
- Foster, J. W., and Waksman, S. A., production of fumaric acid by moulds belonging to the genus *Rhizopus*, III, 327. Fumaric acid formation associated with sexuality in a strain of *Rhizopus nigricans*, III, 426.
- See also Waksman, S. A.
- Foster, L. S., Dix, W. M., and Gruntfest, I. J., preparation and reactions of lead triphenyl derivatives, II, 460.
- Gruntfest, I. J., and Fluck, L. A., amino-compounds of lead triphenyl chloride, II, 460.
- and Tompson, R. Y., extraction of germanium and gallium from germanite. III. Recovery of germanium from the arsenious sulphide sublimates, I, 210.
- Foster, M. A., Foster, R. C., and Meyer, R. K., hibernation and the endocrines, III, 676.
- See also Friedgood, H. B.
- Foster, (Miss) M. D., ground waters of the Houston-Galveston [Texas] area; chemical character and industrial utility, I, 540.
- Foster, R. C., and Thornton, M. J., thyroid in treatment of menstrual irregularities, III, 476.
- See also Foster, M. A.
- Foster, R. H. K., standardisation of safety margin, III, 418.
- Foster, R. T., Howell, W. N., and Robertson, A., furano-compounds. IV. Synthesis of *allobergapten*, II, 383.
- and Robertson, A., furano-compounds. II, II, 383.
- Robertson, A., and Healy, T. V., usnic acid. VII. Analogues of usnic acid, II, 558.
- Foster, W. See Bratton, A. C., and McCleendon, J. F.
- Foster, W. C. See Cavett, J. W.
- Fostvedt, G., *in vitro* studies of melanophore-principle activity of pituitary gland, III, 907.
- Foter, M. J., and Golick, A. M., inhibitory properties of horse-radish vapours, III, 433.
- Fothergill, L. D., and Dingle, J. H., fatal disease of pigeons caused by the virus of the Eastern variety of equine encephalomyelitis, III, 335.
- Fouasson, F., hydrates of neutral sodium tellurate, I, 484.
- Fouchier, J. See Vavon, G.
- Foulds, L., production of transplantable carcinoma and sarcoma in guinea-pigs by injections of thorotrast, III, 697.
- See also Gye, W. E.
- Foulk, C. W. See Clippinger, D. R.
- Foulke, D. G. See Schneider, F.
- Fourcade, J. See Cristol, P.
- Fourneau, E. See Bovet, D.
- Fourneau, J. P. See Bovet, D.
- Fournel, J., causes of interspecific differences in excretion of ammonia by mammals, III, 761.
- See also Bonnet, R.
- Fournier, J., and Feissolle, L., presence of acetone in cerebrospinal fluid during meningeal infections, III, 971.
- Fournier, J. C. M., Albrieux, A. S., and Grosso, O., local effect of luteohormone [progesterone] on uterine mucosa of the infantile rabbit, III, 587.
- Fourt, D. L. See Gildow, E. M.

- Fourt, L., lateral cohesion in protein monolayers, I, 609.
See also Campbell, D. H.
- Fonts, P. J., Helmer, O. M., and Lepkovsky, S., cure of microcytic hypochromic anemia in dogs with crystalline "factor I," III, 811.
See also Blatt, E., and Helmer, O. M.
- Fowkes, F. S. See Hart, L. B.
- Fowler, A. F. See Rabinowitch, I. M.
- Fowler, C. See Mast, S. O.
- Fowler, C. D., feeding infants with low-fat and otherwise modified evaporated milk, III, 991.
- Fowler, G. W. See Hurd, C. D.
- Fowler, J. L. A. See Armstrong, C. W. J.
- Fowler, R. D., and Dodson, R. W., nuclear reaction, I, 233. Intensely ionising particles produced by neutron bombardment of uranium and thorium, I, 234.
See also Dodson, R. W.
- Fowler, R. H., and Jones, H., properties of a perfect Einstein-Bose gas at low temperatures, I, 190.
- Fowler, W. A., scattering of fast electrons, I, 2.
See also Gaertner, E. R., and McLean, W. B.
- Fowler, W. M., and Barer, A. P., treatment of iron-deficiency anemias, III, 547.
- Fox, C. L., jun., Cline, J. E., and Ottenberg, R., products of ultra-violet irradiation of sulphanilamide, III, 710.
- German, B., and Janeway, C. A., effect of sulphanilamide on electrode potential of hemolytic streptococcal cultures, III, 927.
See also Ottenberg, R.
- Fox, G. W., and Burdine, N. T., high-frequency glow discharge in hydrogen excited through internal electrodes, I, 227.
- and Stebbins, D. W., effect of quartz filters on the distribution of energy in Laue patterns, I, 243.
- Fox, H. See Diemair, W.
- Fox, H. H., and Bogert, M. T., thiazoles. XXIII. Synthesis of benzthiazoles structurally related to quinoline anti-malarials, II, 524.
- Fox, H. M., and Wingfield, C. A., portable apparatus for determination of oxygen dissolved in a small volume of water, I, 44.
- Fox, J. G., Creutz, E. C., White, M. G., and Delsasso, L. A., difference in Coulomb energy of light isobaric nuclei, I, 397.
See also White, M. G.
- Fox, J. J., and Martin, A. E., relation between the force constant, internuclear distance, and the heat of rupture of a linkage, I, 62. Infra-red spectra in the 3 μ . region of naphthalene, 1- and 2-methylnaphthalene, quinoline, and isoquinoline: an aid to analysis, I, 179. New OH band in a carboxylic acid [methoxybenzoic acid], I, 240. Relation between internuclear distance, force constant, and energy of dissociation for carbon-to-carbon linkages, I, 406.
- Fox, J. P. See Robertson, O. H.
- Fox, T. See Gold, H.
- Fox, W. B. See Huston, R. C.
- Foy, H., and Kundi, A., spleen puncture findings in blackwater fever, III, 121. Anahemin in nutritional anemia, III, 1025.
- Frada, G. See Gioglia, L.
- Fraenkel, L., and Papanicolaou, G. N., growth, desquamation, and involution of the vaginal epithelium of fetuses and children, and related hormonal factors, III, 59.
- Fraenkel-Conrat, H., reversed aldol condensation, II, 493.
See also Evans, H. M., and Slotta, K. H.
- Fragstein, P. von. See Ulich, H.
- Frahm, E. E., effect of plant growth-substances on vitamin content and reproduction of *Lemma*, III, 637.
See also Clark, N. A.
- Frahm, H. See Hess, K.
- Frampton, O. D. See Dounce, A. L.
- Frampton, V. L., viscosimetric studies of the tobacco mosaic virus protein. I, III, 869.
and Saum, A. M., estimate of the maximum value for the mol. wt. of the tobacco mosaic virus protein, III, 530.
and Taylor, C. F., isolation and identification of pigment present in cultures of *Actinomyces violaceus-ruber*, III, 425.
- France, A., adelphophagy in *Pisania maculosa*, III, 683.
- França, J. See Hauptmann, H.
- Français, G., derivatives of 2:4-dimethylphenylacetic acid, II, 161.
- Français, J. See Cordier, D.
- France, H., Heilbron, I. M., and Hey, D. H., terphenyl series. II. Hydroxy- and methyl-*p*-terphenyls. III. Preparation and nitration of *m*-terphenyl [*m*-diphenylbenzene], II, 473, 474.
- France, R. L., and Fuller, J. E., precipitation of erythrosin by members of the *coli-aërogenes* group, III, 329.
- France, W. G. See Brod, J. S., and Rigerink, M. D.
- Franceschini, G. See Marri, R.
- Francis, C. C., and Werle, P. P., centres of ossification from birth to 5 years, III, 641.
- Francis, C. R. W. See Taylor, T. W. J.
- Francis, D. S. See Henshaw, P. S.
- Francis, F., and Piper, S. H., higher *n*-aliphatic acids and their methyl and ethyl esters, II, 199.
- Francis, L. D., and Strong, L. C., haemoglobin studies on the blood of female mice of the C.B.A. strain: effects of age, diet, strain and reproduction, III, 229.
- Francis, W. D., spiral structure of protoplasm, III, 532.
- Francis-Bœuf, C., variations of salinity during a September day of the waters of the maritime Aulne at Trégarvan, I, 283.
- Frank, C., and Grandpierre, R., effect of vagotonin on the vasodilation produced by histamine, III, 614.
- Grandpierre, R., and Stankoff, E., urinary elimination of vagotonin-like substance after administration of vagotonin, III, 927.
- Grandpierre, R., and Vidacovitch, M., effect of vagotonin on pulmonary ventilation after section of afferent respiratory nerves, III, 565.
See also Grandpierre, R., Santenoise, D., and Vidacovitch, M.
- Frank, D. See Briner, E.
- Frank, G., anti-gonorrhœa therapy, III, 178.
See also Spillmann, L.
- Frank, H. H., and Louis, V., calcium silicates and nitrogen, I, 622.
See also Louis, F.
- Franck, J., and Rieke, C. *D*-lines in the spectrum of the night sky, I, 439.
and Teller, E., migration and photochemical action of excitation energy in crystals, I, 63.
- Francke, E., toxic cell damage in cases of panmyelophthisis, III, 119.
- Franco, S. See Marzullo, E. R.
- François, F., system mercuric cyanide-mercuric chloride-methyl alcohol; formation of an additive compound of mercuric chloride and methyl alcohol, and detection of a chlorocyanide by the Raman effect, I, 322.
See also Delwaulle, (Mlle.) M. L.
- Frank, A., and Clusius, K., precision measurements of the heats of vaporisation of oxygen, hydrogen sulphide, phosphine, argon, carbonyl sulphide, methane, and monodeuteromethane, I, 373.
- Frank, F. C., melting as a disorder phenomenon, I, 310.
and Wirtz, K., ordering and transformations in condensed phases, I, 11.
See also Fischer, E.
- Frank, I. M. See Groschev, L. V.
- Frank, L. J., impetigo herpeticiformis [treated with sulphanilamide], III, 1080.
- Frank, R. F., female sex hormones, III, 978.
- Frank, S. B., formalised herpes virus therapy and neutralising substance in herpes simplex, III, 208.
- Frank, W. R., and Creech, H. J., chemoantigens and carcinogenesis, III, 697.
- Frank-Fahle, M., Aschheim-Zondek reaction, III, 978.
- Frank-Kamenetzki, D. A., calculation of thermal explosion limits, I, 614.
See also Zeldovitch, J. B.
- Frank-Kamenetzki, G., secondary radiation produced by penetrating component of the cosmic rays, I, 351, 400.
- Frank-Kamenetzki, V. A., oriented displacement of magnetite by iron, I, 456.
- Franke, D. H. See Parade, G. W.
- Franke, H., clinical comparison of circulatory action of members of the adrenaline group, III, 377. Action of vitamin-C, -P, and fruit juice on capillary resistance in various diseases, III, 403. Treatment of bronchitis by prontosil-S inhalations, III, 610.
and Birch-Hirschfeld, A., absorption and excretion of uleron, III, 611.
- Franke, H. M., buffer-indicator analysis of plant and animal tissue, III, 515.
See also Taylor, H. W. Y.
- Franke, W., and Schumacher, H. J., photochemical oxidation of trichlorobromomethane sensitised by bromine and by chlorine, I, 331.
- Franke, Wilhelm. See Gassner, G.
- Frankel, H. S., cultivation of ultrafilterable viruses, III, 1105.
- Frankel, J. J. See Tuft, L.
- Frankel, M., and Katchalski, E., polycondensation of α -amino-acid esters, II, 535.
and Katchalsky, A., time factor in interaction of amino-acids with sugars, II, 10.
and Maimin, R., natural activator of papain, III, 722.
- Frankenthal, L., methylene-blue-reducing system of Palestine orange peels investigated by Thunberg's method, III, 939.
- Frankfurt, M. I., pathogenic significance of lipid nephrosis, III, 486.

- Frankhauser, G., and Griffiths, R. B., induction of triploidy and haploidy in *Triturus viridescens* by cold treatment of unsegmented eggs, III, 739.
- Franklin, K. J., testing the knee-jerk, III, 129. Rotatory movements of apex of exposed mammalian heart, III, 821.
- and Maher-Loughnan, G. P., "circular" musculature of small intestine, III, 147. See also Barclay, A. E.
- Franklin, R. G., preparation of glutathione containing radioactive sulphur, III, 724.
- Franks, A. G., local arterial embolism following intramuscular injection [of iodobismutol and saligenin], III, 1089.
- Franks, W. R., and Byrnes, A. E., experimental insulin and metrazol shock. VI. Glutathione in experimental insulin shock, III, 249.
- See also Banting, F. G.
- Franquet, R., inulin in grafts of annual sunflowers and of perennial Compositae, III, 438.
- Franseen, C. C. See Nathanson, I. T.
- Frantuzova, M. A. See Drboglav, M. A., and Palei, T. J.
- Franz, E. See Hüttig, G. F.
- Franz, W., scattering of radiation by the magnetic electron, I, 297. Theory of electrical breakdown of solid insulators, I, 510.
- Franzevitsch, I. M. See Biletzki, S. F.
- Franzini, T., working of a proton tube, I, 160.
- Fraps, G. S. See Couch, J. R., Kemmerer, A. R., and Sherwood, R. M.
- Frary, S. G. See Booth, H. S., and Tarbutton, G.
- Fraser, A. H. H., Godden, W., Snook, L. C., and Thomson, W., influence of diet on ketonæmia in pregnant ewes, III, 298.
- Fraser, A. M., effect of magnesium on response of the uterus to posterior pituitary hormones, III, 714.
- Fraser, D. M., and Butler, R. D. [with Hurlbut, C. S., jun.], prehnite from Coopersburg, Pennsylvania, I, 47.
- Fraser, H. F. See Sebrell, W. H., and Topping, N. H.
- Fraser, R., and Reitman, F., clinical study of effects of short periods of severe anoxia with special reference to the mechanism of action of cardiazol "shock," III, 671.
- and Stanley, D. A., interruption of coma in insulin shock therapy, III, 250.
- Fraser, R. H., White, F. D., and Perrin, M. B., undulant fever: use of prontosil and prontosil, III, 304.
- Frasin, I., and Strat, C., absence of pectoral muscles, III, 442.
- Fravi, G. G., changes in gastric secretion and blood count following stomach operations, III, 483.
- Frayer, L. See Jackson, R. L.
- Frazer, A. C., and Stewart, H. C., inactivation of cobra venom by adsorption, III, 190. Evidence of fat/fatty acid partition in human fat absorption, III, 270. Interpretation of normal chylomicrograph, III, 554. Chylomicrograph technique, III, 554. Behaviour of chylomicrons compared with that of protein-protected soap-stabilised oil-in-water emulsions, III, 622. Secondary protection of soap-stabilised oil-in-water emulsion by protein, III, 622. See also Elkes, J. J.
- Frazier, C. N., and Li, H. C., vitamin-A deficiency in man; resolution of cutaneous lesions following parenteral administration of carotene, III, 73.
- Frazier, W. D., and Ravdin, I. S., use of vitamin-B₁ in preoperative preparation of the hyperthyroid patient, III, 257. See also Rhoads, J. E.
- Freak, R. H., and Robinson, (Sir) R., derivatives of 3-carboline, II, 88.
- Fredenhagen, K., precipitation and other reactions in liquid hydrogen fluoride, I, 485.
- and Schulze, W., theory of solutions. II. Significance of partial molar quantities in the theory of solutions, I, 516.
- Frederick, K. J., and Hildebrand, J. H., specific heats and heats of fusion and transition of carbon tetrabromide, I, 410.
- Fredericq, H., inhibitory action [on heart] of vagal stimulation at optimum frequency and at low frequency, III, 558. Secondary refractory period of cardio-inhibitor mechanism of tortoise; action of two or three vagal stimuli, variously spaced, III, 745.
- and Bacq, Z. M., caffeine and cholinergic nerves, III, 36. Action of xanthine derivatives on the autonomic nervous systems, III, 308.
- Frederiksen, E. See Veibel, S.
- Frederiksen, O. See Engelbreth-Holm, J.
- Fredga, A., reaction of α -thiocyanopropionic acid with water, I, 617.
- Frediani, H. A., hydrogen electrode for p_H micro-determinations, I, 221.
- and Babler, B. J., colorimetric determination of barium, I, 577.
- and Gamble, L., microscopical detection of rubidium in the presence of caesium, I, 216.
- Fredlund, E., absolute measurements of radiometric action in gases, I, 63.
- Fredrich, A. See Zetzsche, F.
- Freed, H., Ludlum, S. De W., and Strecker, E. A., changes in the glucose-tolerance test occurring during and after insulin shock therapy for schizophrenia, III, 173.
- See also Spiegel-Adolf, M.
- Freed, S., McMurry, H. L., and Rosenbaum, E. J., properties of white sapphire, I, 628.
- and Thode, H. G., nature of the solutions of metallic sodium in liquid ammonia, I, 136.
- Weissman, S. I., Fortess, F. E., and Jacobson, H. F., ions of europium distributed between different configurations in homogeneous solutions, I, 605.
- Freed, S. C., Greenhill, J. P., and Soskin, S., biphasic effect of male sex hormone on the pituitary of the female rat, III, 384. See also Greenhill, J. P.
- Freedman, B. See Nicol, H.
- Freeman, A., pellagra: report of two cases in psychotic patients, III, 767.
- Freeman, B. C., Bell River complex, N.W. Quebec, I, 284.
- Freeman, E. B., gastroscopic study compared with other methods of diagnosis in gastric lesions, III, 592.
- Freeman, G., and Hartley, G., hypertension in a patient with a solitary ischaemic kidney, III, 123.
- Freeman, Harry, and Lengyel, B. A., effects of high humidity on skin temperatures at cool and warm conditions, III, 513. See also Rubin, M. A.
- Freeman, N. E., and Wallace, W. McL., effect of concentrated serum on plasma volume and serum-protein concentration, III, 352.
- Freeman, W. See Johnson, V.
- Freerksen, E., structure of human iris, III, 641.
- Frehden, O., and Fürst, K., use of drop analysis for investigation of medicinals. V. Detection of small quantities of primary aromatic amines. VI. Selective test for formic acid. VII. Detection of polyhydroxy-compounds, II, 134, 194.
- and Huang, C. H., use of drop analysis for investigation of medicinals. VIII. Detection of aldehydes with stable reagent paper. IX. Detection of free chlorine and substances containing chlorine, I, 213; II, 194.
- Frei, W., skin test in lymphogranuloma inguinale, III, 331.
- and Hess, E., action of autonomic drugs on infections, III, 309.
- and Sulzberger, M. B., arsphenamine hypersensitiveness in guinea-pigs. I. Cutaneous and anaphylactic responses to old arsphenamine and to neo-arsphenamine after sensitisation with old arsphenamine, III, 90.
- Freidlin, L. C., selective action of catalysts on the reaction of conversion of fusible formates into oxalates, I, 88.
- and Bulanova, T. F., reaction of sodamide with fused aromatic ketones, II, 376.
- and Lebedeva, A. I., reaction of sodamide with salts of organic acids, II, 532.
- Freise, F. W., æolian soils from Brazil, I, 48. Conditions of formation of nitrates in caves, I, 343.
- Frejka, J., and Šefránek, B., preparation of 3:6-di- and 3:4:6-tri-bromopyrocatechol, II, 312.
- Fréling, B., and Laffitte, P., spontaneous inflammation of n -hexane-air mixtures, I, 475.
- Fremming, K., and Winther, K., case of marantic intracranial venous sinus thrombosis, III, 470.
- French, C. L. See Peters, C. A.
- French, C. S. See Wessler, S.
- French, J. O., effect of sulphanilamide on blood in scarlet fever, III, 1081.
- French, S. G. See Horan, V. G.
- Frenguelli, B. See Mangini, A.
- Frenkel, H. S., culture of the virus of foot and mouth disease, III, 208.
- Frenkel, J., pre-breakdown phenomena in insulators and electronic semi-conductors, I, 10. Theory of elasticity, viscosity, and swelling in polymeric rubber-like substances, I, 197. Statistical theory of condensation phenomena, I, 261. Splitting of heavy nuclei by slow neutrons, I, 398. General theory of heterophase fluctuations and pretransition phenomena, I, 454. Superfluidity of liquid helium II, I, 462. Mechanism of muscular activity, III, 367.
- See also Blochinzev, D. I.
- Frensch, H. D., use of eupaverine in arterial embolism, III, 86.
- Frenzel, M., significance of sedimentation rate, III, 742.
- Fréon, A. See Auger, P., and Ehrenfest, P., jun.
- Freon, P., preparation of α -hydroxy-aldehydes, II, 243.

- Frèrejacque, M., heterosides of feebly basic amines, II, 10. "Condensation" of an organic molecule, II, 353. *d*-Arabitol in *Fistulina hepatica*, III, 733.
- Freri, (Signa.) M., deviations in the Claisen condensation, II, 26.
- Frers, J. N., natural periodic system of the non-ionic compounds. II., I, 61.
- Fretwurst, F., and Never, H. E., hypnotic action and excretion of dormovit, III, 87.
- Freud, J., genital accessories of female rats. I. and II., III, 144.
- Levie, L. H., and Kroon, D. B., growth (chondrotrophic) hormone [of anterior pituitary] and localisation of point of attack, III, 1046.
- and Vedder, A., structure of rat ovaries under varying conditions, III, 684.
- Freudenberg, E., metabolic changes in rickets, III, 605.
- Freudenberg, K., natural organic high-molecular substances, II, 132. Lignin, II, 332.
- and Boppel, H., methylated starch, II, 51.
- and Keller, R., sulphuric esters of the components of pine wood, II, 171.
- Klinck, F., Flickinger, E., and Sobek, A., lignin. XX. Union of formaldehyde in lignin, II, 171.
- and Lautsch, W., constitution of pine lignin, II, 273.
- and Müller, H. F., lignin. XIX. Derivatives of pine lignin containing mercury and iodine, II, 80.
- Piazolo, G., and Knoevenagel, C., polymeric anhydrides of glycine and asparagine, II, 101.
- and Plankenhorn, E., synthesis of 2:4:6-trimethylglucose and its relationship to yeast glucan, II, 8.
- Plankenhorn, E., and Boppel, H., methylation of cellulose, II, 52.
- and Ploetz, T., difference between cellulase and lichenase. I. Enzymic decomposition of polymeric carbohydrates, III, 723.
- Freudenberg, Rudolf, blood-sugar during insulin shock, III, 120.
- Freudenberg, Werner. See Pizzarello, R. A.
- Freund, E., behaviour of joint cartilage in late rickets, III, 291.
- Freund, H. A., and Sokolov, R., bundle branch block, III, 455.
- Freund, J. See Hehre, E.
- Freund, W. See Casparis, P.
- Freundlich, H., and Gillings, D. W., comparison of the influence of audible sound and of ultrasonic waves on colloidal and two-phase systems, I, 142.
- and Heller, W., adsorption of *cis*- and *trans*-azobenzene, I, 519.
- Freundlich, J., diagnostic significance of chest leads, III, 559.
- Frey, C. N. See Atkin, L., Kirby, G. W., and Schultz, A. S.
- Frey, R. W. See Clarke, I. D.
- Frey, W. See Rupe, H.
- Frey-Wyssling, A., micellar studies explained by example of fine structure of fibres, I, 76.
- and Wuhrmann, K., dependence on temperature of the refractive power of crystallised cellulose, I, 602.
- Freyberg, R. H., Reekie, R. D., and Folsome, C., water, sodium, and energy exchange during the latter part of pregnancy, III, 382.
- Freymann, (Mme.) M., Raman and infra-red absorption spectra of compounds containing 4-co-ordinate nitrogen, I, 121. Absorption spectra of nitrogen derivatives in the near infra-red, I, 179.
- Freymann, R., and Ta, Y., near infra-red and Raman spectra of ammonium salts, I, 7.
- See also Volklinger, H.
- Freymann, R., researches on intra- and inter-molecular links by infra-red absorption spectra. I. Hydroxyl bands, I, 59.
- See also Chiurdoglu, G., Freymann, (Mme.) M., Gerding, H., Lecomte, J., and Volklinger, H.
- Frick, O. See Madison, R. R.
- Fricke, H., and Jacobson, L. E., dielectric study of the gelatin-water system: anomalous dispersion in bound (oriented) water, I, 417.
- Parker, E., and Ponder, E., relative quantity of the fixed framework of the hemolysed rabbit red cell, III, 349.
- and Parts, A., dielectric absorption and dielectric constant of solutions of aliphatic amino-acids, I, 69.
- Fricke, R., active states of solid matter and their significance in inorganic chemistry, I, 63.
- and Bückmann, H. J., active substances. XXXVIII. Study of active substances by Hahn's emanation method, I, 414.
- and Dachs, R., active substances. XXXVI. Surface and heat content of strongly-heated cupric oxides, I, 189.
- and Deifel, H., chemical specificity of those modifications of a particular crystalline species which differ in energy content. II. γ - Al_2O_3 , I, 519.
- and Dürr, W. [with Gwinner, E.], active substances. XXXVII. Thermochemical and X-ray investigation of the processes in the formation of zinc iron spinel from active zinc oxide and various active forms of ferric oxide, I, 273.
- and Gwinner, E., quantitative interpretation of abnormal lattice disorder and admixture of amorphous material with active substances, I, 64.
- and Keefer, H., chemical specificity of those modifications of a particular crystalline species which differ in energy content. III. ZnO and α - Fe_2O_3 , I, 519.
- and Meyer, F. R., heat content and lattice state of active pyrophoric copper, I, 87.
- Fricke, W. See Kern, W.
- Frid, B. I. See Alimarin, I. P.
- Friderichsen, C., tetany in a suckling, III, 256.
- Fried, B. See Green, J. B., and Shortley, G. H.
- Friedel, S., influence of bleeding on p_{H} and bactericidal power of rabbit blood, III, 1107.
- Friedell, H. L. See Keys, A.
- Friedemann, T. E., carbohydrate metabolism of *Staphylococcus aureus*, III, 1013. Metabolism of pathogenic bacteria growing under aerobic conditions in carbohydrate-rich culture media, III, 1102.
- and Kmiecik, T. C., free volatile acidity of blood and tissues following ingestion of ethyl alcohol, III, 1092.
- Friedgood, H. B., adrenalectomy and coitus-induced ovulation in rabbit and cat, III, 977. Induction of oestrus behaviour in anæstrosed cats with follicle-stimulating and luteinising hormones of anterior pituitary gland, III, 1045.
- and Foster, M. A., experimental production of ovulation, luteinisation, and cysts by the corpus luteum in adrenalectomised anæstrosed cats, III, 55.
- and Whidden, H. C., assay of crystalline and urinary androgens; measurement by colorimetric method, III, 983.
- Friedheim, E. A. H., relation between the constitution of 4-*p*-arsinoanilino-naphtha-1:2-quinone-8-sulphonic acid (2654N) and its therapeutic action, II, 191. Biochemistry of the lower fungi. I. Isolation of the red pigment (phenicin) from *Penicillium phanicum*, III, 200. Negative effect of sources of mitogenetic rays on the growth of tissue cultures, III, 868.
- Friedländer, W., gold therapy of lupus erythematoses, III, 779.
- Friedland, C. K. See Montgomery, H.
- Friedlander, M., Bierman, W., and Silbert, S., temperature changes in skin and muscle of lower extremities following intravenous injection of typhoid vaccine, III, 1104.
- Friedlander, R. D. See Shepardson, H. C.
- Friedman, A., Isaacs, R., and Lufkin, A., "average daily reticulocyte response" during therapy in pernicious anæmia, III, 742.
- See also Isaacs, R.
- Friedman, B., Abramson, D. I., and Marx, W., pressor substance in cortex of kidney, III, 239.
- and Prinzmetal, M., vasomotor effects of blood in hypertension, III, 658.
- See also Prinzmetal, M.
- Friedman, B. S. See Ipatiev, V. N.
- Friedman, E. See Meduna, L.
- Friedman, G. J. See Ralli, E. P.
- Friedman, G. S. See Friedman, M. H.
- Friedman, H. See Beeman, W. W.
- Friedman, H. B., and Anderson, B. E., neutral salt action. I. Effect of neutral salts on the velocity of the reaction $2\text{Fe}(\text{CN})_6''' + 3\text{I}^- \rightarrow 2\text{Fe}(\text{CN})_6''' + \text{I}_3'$, I, 151.
- and Davis, J. J., jun., green gold sols, I, 23.
- and Stokes, J. A., jun., neutral salt action. II. Effect of neutral salts on the hydrolysis of copper sulphate, I, 151.
- Friedman, I., Ott, L. H., and Oughterson, A. W., recording oscillogram, III, 124.
- Friedman, L., dark-field examination of pus for *Spirochaeta pallida*, III, 526.
- Friedman, Leo, and Carpenter, P. G., diffusion velocity and mol. wt. I. Limits of validity of the Stokes-Einstein diffusion equation, I, 463.
- and Klemm, K., diffusion velocity and mol. wt. II. Effect of p_{H} on particle size in gelatin solutions, I, 463.
- and Shearer, W. N., effect of non-electrolytes on the time of setting of gelatin gels, I, 470.
- Friedman, M., and Katz, L. N., renal insufficiency following trypsin injection into the renal arteries, III, 151.
- See also Katz, L. N.
- Friedman, M. H., assay of gonadotropic extracts in the postpartum rabbit, III, 687.

- Friedman, *M. H.*, and Friedman, *G. S.*, seasonal variations in the gonadotropic hormone content of the rabbit pituitary, III, 677.
- Friedman, *M. H. F.*, gastric secretion in birds, III, 591.
- Friedman, *M. M.* See Polatin, *P.*
- Friedman, *N. B.*, chronic hypoglycæmia; two cases with islet adenoma and changes in the hypophysis, III, 910.
- Friedmann, *E.*, Solomon, *A. K.*, and Werthessen, *N. T.*, radioactive organic bromo-compounds, II, 198.
See also Morgan, *E. J.*
- Friedmann, *S.*, determination of starch-liquefying power [of amylases], III, 940.
- Friedrich, and Peters, treatment of liver cirrhosis with uncooked food, III, 485.
- Friedrich, *H.*, colour reaction for diagnosis of degeneration of potato tubers, III, 883.
- Friedrich, *K.* See Rohmann, *C.*
- Friedrich, *O.*, formation and structure of Styrian graphites, I, 287.
- Friedrich, *W.*, ultra-violet dosimetry, III, 318.
- Friedrich-Freksa, *H.*, and Müller, *H. A.*, fertility of mice treated with oestrone, III, 584.
- Frieh, *P.* See Martin, *P. E.*
- Friend, *A. W.* See Colwell, *R. C.*
- Friend, *D. G.*, and Robinson, *R. W.*, action of sodium thiocyanate on tissue oxygen consumption, III, 779.
- Friend, *J. G.*, iron ascorbate in treatment of anaemia, III, 447.
- Friend, *J. N.*, and Alchin, *J. P.*, presence of less common elements in rocks, I, 437.
and Hall, *D. A.*, lower hydrates of lanthanum and praseodymium nitrates, I, 36.
and Vallance, *R. H.*, vanadiferous nodules in Worcester Clay, I, 588.
- Fries, *C.* See Emmons, *R. C.*
- Fries, *J. H.*, device to aid in fluoroscopy of infants, III, 639.
- Friese, *H.*, Clotofski, *E.*, and Döderlein, *R.*, chemical composition of pine bark, II, 359.
- Frimberger, *F.*, changes of viscosity and sedimentation rate in colloidal solutions, I, 77. Relationship between spherocytosis and sedimentation rate, III, 648.
- Frisbee, *F. C.* See Applebaum, *M.*
- Friscelli, *M.* See Martinetti, *R.*
- Frisch, *A. W.*, clumping of extracellular encapsulated pneumococci in sputum for control of serum therapy, III, 1012.
- Frisch, *E.*, X-ray therapy of intermittent claudication, III, 746.
- Frisch, *K. von.*, importance of sacculus and lagena for the hearing of fish, III, 134.
- Frisch, *O. R.*, physical evidence for the division of heavy nuclei under neutron bombardment, I, 233. Statistical calculation of composite decay curves, I, 444.
See also Meitner, *L.*
- Frisch, *P.* See Reinhold, *H.*
- Frisch, *S.* See Vanjukov, *M.*
- Frisch, *S. E.*, luminescence of vapour-gas mixtures, I, 136. Zeeman effect with cesium, I, 228.
- Frisk, *A. R.* See Berglund, *H.*
- Fritsch, *F. E.*, and De, *P. K.*, nitrogen fixation by blue-green algae, III, 339.
- Fritsch, *L.* See Milbauer, *J.*
- Fritz, physio-pathology of the retinal circulation, III, 659.
- Fritz, *C.*, effect of feeding grit on digestibility in the domestic fowl, III, 71.
See also Titus, *H. W.*
- Fritz, *R.* See Grosdenis, (*Mme.*) *O.*
- Fritzman, *E. C.*, and Krinitzki, *V. V.*, complex compounds of platinum metals with thio-, seleno-, and telluro-ethers. II. Influence of the medium on formation of *cis*- and *trans*-isomerides, I, 334.
- Fritzsch, *E.* See Brederick, *H.*
- Fritzsch, *H.* See Karrer, *P.*
- Frivold, *O. E.*, Hassel, *O.*, and Hetland, *E.*, refractive index and molecular refraction of methane and deuteromethane, I, 127.
- Frizet, *P.* See Derrien, *Y.*
- Fro, *R.* See Garrido, *J.*
- Frobenius. See Kalk, *H.*
- Procraïn, *L.* See Lasausse, *E.*
- Fröhlich, *H.*, dielectric breakdown in ionic crystals, I, 551. Theory of electrical breakdown in ionic crystals. II, I, 551.
Heitler, *W.*, and Kahn, *B.*, deviation from the Coulomb law for the proton, I, 447.
and Mott, *N. F.*, mean free path of electrons in polar crystals, I, 554.
- Fröhlich, *W.* See Rumpf, *E.*
- Frölich, *F.*, effect of potential on the dispersion of the dielectric constants of strong electrolytes, I, 192.
- Proentjes, *W.* See Lifschitz, *I.*
- Fröschel, *P.*, physiology of germination. I. Inhibitors, III, 882.
- Froger, *C.*, detection of chloride in chlorovinylarsine (lewisite), II, 496.
- Froberg, *M. H.*, occurrence of riebeckite in the Michipicoten district, Ontario, I, 542.
- Frolich, *P. K.* See Sparks, *W. J.*
- Fromageot, *C.*, and Safavi, *R.*, synthetic and independent fermentations. I. Propionic fermentation of pyruvic acid, III, 726.
See also Chaix, *P.*, and Desnuelle, *P.*
- Froman, *D. K.*, copper shows an anomalously high efficiency for the production of showers when compared with zinc, I, 5.
and Stearns, *J. C.*, cosmic-ray showers and bursts, I, 5. Evidence of neutrons in heavy particle showers, I, 55. Effects of time and meteorological factors on the intensities of cosmic-ray primaries and showers, I, 296.
See also Stearns, *J. C.*
- Froment, *M.* See Rathery, *F.*
- Froment, *R.*, Gonin, *A.*, and Viallier, *J.*, sino-aortic block after digitalis poisoning, III, 777.
and Jeune, *M.*, case of heart failure treated by complete thyroidectomy, III, 41.
and Jourdan, *F.*, paroxysmal ventricular tachycardia in experimental auriculo-ventricular dissociation, III, 236.
See also Jourdan, *F.*
- Frommelt, *E.*, and Scholz, *G.*, gold treatment of infectious diseases, III, 715.
- Frommelt, *H.* See Grunke, *W.*
- Frontali, *G.*, intestinal absorption of various lipins by sucklings, III, 406. Oils as substitutes for butter fat in infant feeding, III, 599.
- Froriep, *E.*, form and behaviour of the Sertoli cell nucleus, III, 52.
- Frosch, *C. J.* See Fuller, *C. S.*
- Frost, *D. V.*, and Elvehjem, *C. A.*, factor *W* and its relation to vitamin-*B* complex, III, 603.
- Frost, *T. T.* See Dodge, *E. F.*
- Frostad, *S.*, case of non-tropical sprue with normoblasts and megaloblasts in peripheral blood, III, 646.
- Frostig, *J. P.* See Himwich, *H. E.*
- Frumkin, *A.*, phenomena of wetting and adhesion of bubbles. I, I, 196. Calculation of the absolute potential of the calomel electrode from the free energy of hydration of gaseous ions, I, 474.
and Gorodetzkaia, *A.*, phenomena of wetting and adhesion of bubbles. II. Mechanism of the adhesion of bubbles to a mercury surface, I, 196.
and Pankratov, *A. I.*, properties of unimolecular layers on salt solutions. II, I, 468.
See also Balaschova, *N. A.*, Bruns, *B.*, Erschler, *B.*, Gerovich, *M.*, Jofa, *S.*, and Lukovzav, *P.*
- Fruton, *J. S.*, and Bergmann, *M.*, proteolytic enzymes of animal tissues. I. Ox spleen, III, 1009.
and Bergmann, *M.* [with Anslow, *W. P.*, jun.], specificity of pepsin, III, 213, 518.
and Lavin, *G. I.*, ultra-violet absorption spectrum of papain, III, 1007.
See also Bergmann, *M.*
- Fry, *A. S.*, and Fisher, *R. A.*, Zeeman effect in the hyperfine structure of I II, I, 589.
- Fry, *E. M.* See Fieser, *L. F.*, and Small, *L.*
- Fry, *H. S.*, and Farquhar, *B. S.*, preparation of thiocarbamides and thiuram disulphides, II, 15.
- Fry, *K.* See Lintgen, *C.*
- Frye, *R. M.* See Combes, *L. S.*
- Fuchs, *A. M.* See Spain, *W. C.*
- Fuchs, *E.* See Hanus, *F.*
- Fuchs, *F. W.*, microbiology of coal, III, 730.
- Fuchs, *H.*, isolation of spermine as flavianate, II, 143. Biological action of colamine, mono- and di-methylcolamine, and of their phosphoric esters, and of cholinephosphoric acid, III, 183. Composition of mucous membrane of stomach, III, 841.
and Wisselinck, *A.*, treatment of sprue with nicotinic acid, III, 767.
- Fuchs, *H. G.* See Ackermann, *D.*, and Reichstein, *T.*
- Fuchs, *K.*, stability of nuclei against β -emission, I, 547.
- Fuchs, *O.*, and Brendlein, *H.*, action of sulphur in catalytic hydrogenations at high pressure, I, 151.
- Fuchshuber, *H.*, reducing the evaporation time in the determination of silicon by the Otis-Handy method, I, 39.
- Fucks, *W.*, and Schumacher, *G.*, discharge voltage variations in molecular gases due to irradiation, I, 394.
- Füchtbauer, *C.*, and Heesen, *W. von.*, broadening and displacement of the medium and higher potassium series lines through helium at high pressure, I, 543.
- Fühner, *H.*, poisonous honey, III, 189.
- Fünfer, *E.*, neutrons in cosmic ultra-radiation, I, 115. Excitation functions for neutrons from beryllium and boron obtained with Th-*C'* α -rays, I, 349.
- Fünfgeld, *E.* See Weinert, *W.*
- Fuentes, *P. V.*, and Canzoni, *R.*, abnormal yellow diazo-reaction in icteric sera, III, 450.
- Fürst, *K.* See Frehden, *O.*
- Fürth, *R.*, fluctuation phenomena in γ -rays. II, I, 231.
- Ornstein, *L. S.*, and Milatz, *J. M. W.*, theory of liquids, I, 183.

- Fugate, W. O. See Fuson, R. C.
- Fuhrmann, H., measurement of the excitation function of metals of high b.p. on excitation by electron collision, I, 291.
- Fuhrly, H., psychological insulin resistance, III, 250.
- Fujii, K., effect of walking and excitement on leucocyte count in sympathetomized dogs, III, 371. Effect of haemorrhage on pressor action of adrenaline, III, 581. "Vasodepressive substance" in blood, III, 652. Depressor action of rabbit's blood, III, 660.
- Fujii, Katsuya, and Matsukawa, T., saponins. IV. Saponin of the fruits of one of the Chinese gleditsias, II, 161. Saponins and sterols. V. Synthesis of 17-methylandrosten-17-ol-3-one (17-methyltestosterone). VI. Oxidation of dibromo[dihydro]cholesteryl acetate; synthesis of pregnen-3-ol-20-one, II, 166.
- Fujikawa, F., antiseptic action of phenols, phenolcarboxylic acids, and of the lichens containing them and of their esters. II. Antiseptic action of orsellinic esters on shoyu, III, 929.
- and Sengoku, H., orsellinic esters, II, 424.
- Fujimaki, Y., Arimoto, K., Inagaki, K., and Takagi, K., relation between power of sustaining exercise and nutrition. I. Proteins, III, 161.
- Fujise, S., syntheses in the hexahydrofluorene series, II, 73.
- Fujita, A., and Ebihara, distribution of vitamin-C in animal and plant tissues. II., III, 496. Colorimetric determination of vitamin-C, III, 497. Bound ascorbic acid of plants, III, 769.
- Ebihara, F., and Numata, I., oxidation of ascorbic acid by haemoglobin, III, 768.
- Hata, T., Numata, I., and Ajisaka, M., determination of cytochrome c in tissues, III, 938.
- and Numata, I., colorimetric determination of glutathione. I. Reduced glutathione. II. Total glutathione, III, 538. Iodometric determination of glutathione in tissues. I. Reduced glutathione. II. Total glutathione, III, 538. Colorimetric determination of cysteine and cystine, III, 538.
- Fujita, Shigefumi, liquids of standard viscosity, I, 46.
- Fujita, Shizuo, formation of amino-acids by trypsin, III, 423. Effect of the pancreatic juice and trypsin on polypeptides, III, 722.
- Fujita, T., stripes of Retzius in the enamel of different teeth, III, 957.
- Fujiwara, S. See Asano, M.
- Fujiwara, T., fine structure of the dark-light X-ray diffraction line obtained by convergent X-rays, I, 599. Method of producing a long single-crystal wire of aluminium with any desired crystallographic axis, I, 627.
- See also Kishi, S., and Nakahara, W.
- Fujiwara, T. F., Ponceau-fuchsin stain for androgenic adrenal cortical cells, III, 911.
- Fukuda, S., nitrogenous extractives and organic bases of pancreas, III, 1061.
- Fukui, G., and Chikamori, T., components of resins. XIII. Constitution of hino-kiol, II, 438.
- Fukumoto, T. See Kameyama, N.
- Fukushima, E., acenaphthene as a polyploidising agent, III, 732.
- Fukushima, M. See Iwasé, K.
- Fularska, J. See Krause, A.
- Fulchignoni, E., behaviour of the heart in experimental epilepsy, III, 123. Faradic and strychnine stimulation of the sensory-motor region of the cerebral cortex in the ass, III, 468.
- Fulde, A. See Thielepape, E.
- Fulga, I. See Maxim, N.
- Fuller, A. T., Colebrook, L., and Maxted, W. R., factors which determine the fate of haemolytic streptococci (group A) in shed blood and in serum, III, 527.
- and Maxted, W. R., type of group A haemolytic streptococcus which fails to form peroxide, III, 795. Production of haemolysin and peroxide by haemolytic streptococci in relation to non-haemolytic variants of group A, III, 944.
- Fuller, C. S., and Frosch, C. J., chain structure of linear polyesters, I, 245. X-Ray investigation of the decamethylene series of polyesters, I, 601.
- See also Katz, J. R.
- Fuller, J. E. See France, R. L.
- Fuller, M. L., electron-diffraction effects from polished zinc surfaces, I, 13.
- Fuller, R. E., gravitational accumulation of olivine during the advance of basaltic flows, I, 498.
- Fulmer, E. I., Dunning, J. W., and Underkoffler, L. A., effect of concentration of mannitol on production of fructose by *Acetobacter suboxydans*, III, 1099.
- See also Lesh, J. B.
- Fulton, C. C., alkaloids and their reagents, II, 464.
- Fulton, F. T. See Roberts, C. P.
- Fulton, J. D., and Robinson, (Sir) R., derivatives of β -naphthaldehyde, II, 112.
- Fulton, J. F., physiology of the nervous system, III, 32. Cerebral regulation of autonomic function, III, 570.
- See also Walker, A. E.
- Fulton, R. P. See Toomey, J. A.
- Funakubo, E., and Hirotani, T., introduction of the triphenylmethyl group. VII. VIII. Mobility of the bromine atom in triphenylmethylisochavibetol and in its derivatives. III. IV., II, 475.
- and Kawasaki, G., attempted applications of camphor oil. I. Diphenylmethyl derivatives of isochavibetol. I., II, 474.
- Funaoka, S., and Saito, N., complement in lymph, III, 355.
- Funk, E., determination of protein in *Melilotus albus* with the aid of the Pulfrich photometer, III, 539.
- Funk, C., pyridine substances in nutrition in relation to vitamin-B₁ problem, III, 601.
- and Funk, I. C., importance of nicotinic acid and nicotinamide in nutrition, III, 603.
- Funk, G., bleaching of dried leaves in light: relation to species, stage of growth, and disease, III, 801.
- Funk, I. C. See Funk, C.
- Funk, W., fermentation inhibitors in blood, III, 451.
- Funke, E. See Axmacher, F.
- Funke, R. See Ehrhardt, K.
- Fuehy, E. B., anaesthetic procedures used at the Mayo Clinic. II. For neurologic surgery, III, 88.
- Fuoss, R. M. See Elliott, M. A., and Mead, D. J.
- Furchgott, R. F. See Abramson, H. A.
- Furey, E. D., normal variations in proteins and inorganic elements of the blood serum, III, 232.
- Furman, N. H., electro-titrations, I, 533.
- Furnival, G. M., geology of the area north of Contact Lake, N.W.T., Canada, I, 438. Quartz "dykes," I, 586.
- Furry, W. H., Jones, R. C., and Onsager, L., isotope separation by thermal diffusion I, 395.
- Furst, W. See Ornsteen, A. M.
- Furter, M., determination and knowledge of molecular refraction. I. II. Determination of sp. gr. at high temperatures, I, 103.
- and Gubser, H., conductometric micro-titration of organic acids, II, 133.
- and Meyer, R. E., photometric determination of vitamin-E, III, 404.
- See also Ruzicka, L.
- Furth, neoplasm of monocytes of mice and its relation to similar neoplasms of man, III, 489.
- and Furth, O. B., monocytic leukaemia and other neoplastic diseases occurring in mice following intrasplenic injection of 1:2-benzpyrene, III, 159.
- See also Breadis, C.
- Furth, O. B. See Furth, J.
- Fusco, R., pyrazole synthesis. IV. Action of α -halogenohydrazones on sodium derivatives of β -ketonic esters. V. Action of α -halogenohydrazones on sodium salts of *sym.*- β -diketones. VI. Action of α -halogenohydrazones on sodium salts of *as.*- β -diketones, II, 451.
- and Musante, C., heterocyclic syntheses. IV. [Five-membered rings containing 2 N and S or Se], II, 91.
- See also Quilico, A.
- Fuson, R. C., Christ, R. E., and Bradsher, C. K., dihydro-1:4-pyrans. VI. Opening and closing of the ring, II, 556.
- and Corse, J., $\alpha\beta$ -diarylacetylene glycols. I. New type of enediol, II, 260.
- Corse, J., and Horning, E. C., esterification of highly hindered acids, II, 319.
- Corse, J., and McKeever, C. H., $\alpha\beta$ -diarylacetylene glycols. II. An enediol from hexaethylbenzil, II, 503.
- Emerson, W. S., and Gray, H. W., arylglyoxals and steric hindrance, II, 162.
- Emerson, W. S., and Weinstock, H. H., *jun.*, synthesis of mixed benzoinis. III., II, 162.
- Fisher, C. H., Ulliot, G. E., and Fugate, W. O., reactions of bromomagnesium enolates of mesityl ketones. I., II, 373.
- Fugate, W. O., and Fisher, C. H., reactions of bromomagnesium enolates of mesityl ketones. II. Condensation, II, 507.
- Gray, H., and Gouza, J. J., acyloins from *tert.*-butylglyoxal, II, 508.
- Ross, W. E., and McKeever, C. H., condensation of paraformaldehyde with aromatic ketones. I. II. Mesityl ketones, II, 68, 162.
- Ulliot, G. E., and Hickson, J. L., benzoylmesitylacetylene, II, 162.
- and Wolf, D. E., methylation of β -ketonitriles, II, 508.
- Fustinoni, O., survival of toads after adrenalectomy, III, 139.
- and Porto, J., morphology of adrenal gland in *Bufo arenarum*, III, 41.
- Fletcher, P. H., peculiarity of pigmentation of the upper arm of negroes, III, 297.
- Fuzii. See under Fujii.

- Fuzikawa. See under Fujikawa.
 Fuziwara. See under Fujiwara.
 Fwu Tarng Dun, dorsal root potential in frog, III, 569.
- G.
- Gabler, F., Faraday effect in heavy water, I, 127.
 Gabler, R. See Weygand, C.
 Gábor, I. See Sellei, C.
 Gabovitsch, M. D. See Morgulis, N. D.
 Gaby, R. E. See Bates, G.
 Gad, U. See Harpóth, H.
 Gaddum, J. H., error of the oxytocic assay of posterior pituitary extracts, III, 379. Accuracy of a cross-over test, III, 713.
 Jang, C. S., and Kwiatkowski, H., effect on intestine of substance liberated by adrenergic nerves in rabbit's ear, III, 749.
 and Kwiatkowski, H., action of ephedrine, III, 85. Substance liberated by adrenergic nerves in the rabbit's ear, III, 1039.
 Gaddy, V. L. See Wiebe, R.
 Gadolin, H. R., treatment of streptococcal meningitis of nasal origin, III, 178.
 Gaebler, O. H., and Bartlett, P., effects of anterior pituitary preparations and iodine on nitrogen excretion, creatinuria, and basal metabolism, III, 973.
 Gaensbauer, F., and Bradbury, J. T., comparative potency of commercial anterior pituitary-like preparations, III, 1045.
 See also Bradbury, J. T.
 Gartner, H., X-ray studies of fine structure in industrial dusts, III, 1093.
 Gaertner, E. R., Fowler, W. A., and Lauritsen, C. C., γ -radiation from boron bombarded by deuterons, I, 172.
 Gaethgens, G., hypovitaminosis-C [and thrombopenia], III, 9.
 Gátzi, K., methyl 17(α)-hydroxy-3-keto- Δ^4 -cholestanate and methyl androstane-17(α)-ol-3-one 17-acetate, II, 328.
 See also Reichstein, T., and Ruzicka, L.
 Gafafer, W. M., disabling morbidity among industrial workers, first quarter of 1939, III, 1092.
 Gaffney, M., sulphanilamide in *Brucella abortus* infection, III, 82.
 Gaffron, H., reduction of carbon dioxide with molecular hydrogen in green algae, III, 534.
 Gage, D. M., and Barker, E. F., infra-red absorption spectrum of boron trifluoride, I, 449.
 Gage, F. W. See Gucker, F. T., jun.
 Gagendragad, N. G. See Jatkar, S. K. K.
 Gage, A. P., Winslow, C. E. A., and Herrington, L. P., influence of clothing on physiological reactions of the human body to varying environmental temperatures, III, 316.
 See also Winslow, C. E. A.
 Gaillard, P. J., origin of the pars intermedia of the hypophysis, III, 45. Anterior pituitary in culture, III, 473.
 and Varossieau, W. W., structure of explants from different stages of development of the testis on cultivation in media obtained from individuals of different ages, III, 268.
 Gaines, J. A. See Geist, S. H.
 Gaines, W. L., live weight and milk-energy yield, III, 395. Nutrients for lactation, working maintenance, and gain in live weight in [American] dairy cows, III, 397.
 Gaines, R. V. See Waldschmidt, W. A.
 Gainsborough, G. F., the diode as a frequency-changer for measurements at ultra-high frequencies, I, 626.
 Gainsborough, H., cod-liver oil in ulcerative colitis, III, 843.
 Gairdner, D., association of gallstones with acholuric jaundice in children, III, 759.
 Gairns, S. See Banting, F. G.
 Gaiser, G. See Meisenheimer, J.
 Gaisford, W. F., Evans, G. M., and Whitelaw, W., parental therapy with M. & B. 693 soluble, III, 1082.
 Gajatto, S., pharmacology of sulphur. I. Suspensions of sulphur in gum arabic and body temperature. II. Solutions of sulphur in olive oil and body temperature. III. Sulphur in vaseline and body-temperature. IV. Solutions of sulphur in carbon disulphide and body temperature. V. Dispersion media for injected sulphur and the effect on body temperature, III, 91, 191, 415. Seasonal variations of blood- and tissue-glutathione in rabbit, III, 893. Pharmacology of sodium gluconate, III, 934. Pharmacology of sodium lactate, III, 934.
 Gajdos, A., inhibiting action of malonic acid on liver- and serum-lipase, III, 871. Effect of ascorbic acid on lipase content of serum, III, 995.
 Gal, E., action of sodium cacodylate and colchicine on dehydrogenases, III, 196.
 Galak, V. M., dropping funnel for use at high pressures, I, 224. Universal potash bulb, I, 281. Wash-bottle, I, 281.
 Galamini, A., alimentary value of hydrogenated oils, III, 918. Distribution of sulphur compounds in organism of animals on diets with added sulphur-containing amino-acids, III, 925.
 and Minozzi, M. T., effect of ascorbic acid on isolated uterus of guinea-pig and rat, III, 921.
 and Pirani, A., effect of vitamin-D on experimental anaemia, III, 922.
 Galatis, L., derivatives of α -aminophenol. II, I, 59.
 Galavotti, B. See Paltrinieri.
 Gale, E. F., formic dehydrogenase of *B. coli*; inactivation by oxygen and protection in the bacterial cell, III, 785.
 and Stephenson, M., L-malic dehydrogenase and codehydrogenase of *B. coli*, III, 939.
 Gale, W. A., Foshag, W. F., and Vonsen, M., teepelite, a new mineral from Borax Lake, California, I, 285.
 Galgiani, J. V., Proescher, F., Dock, W., and Tainter, M. L., effects from inhalation of strong solutions of epinephrine, III, 841.
 Galinovski, F., and Bretschneider, H., cholestenone pinacone and its thermal decomposition, II, 119.
 Galinowski, Z., bone marrow in typhoid fever examined by sternal puncture, III, 226. Bone marrow in typhus abdominalis. I. Erythropoiesis, III, 446.
 Galinski, L. See Ionesco, N. G.
 Gall, E. A. See Talbot, J. H.
 Gall, L. S. See Weil, A. J.
 Gallagher, D., geology of a portion of the Lupa goldfield [E. Africa], I, 499.
 Gallagher, D. M. See Zahl, P. A.
 Gallagher, H. J. See Wheeler, K. M.
 Gallais, F., constitution of mercurithiocyanates, I, 401. Determination of organic acids in blood serum, III, 552.
 Galletti, S. H., preparation and chemistry of phytin from an Argentine rice bran, III, 439.
 Galli, F., and Vieuchange, J., reactivation of formolised neurovaccine by dialysis, III, 948. Effect of trypsin on neurovaccine treated with formaldehyde, III, 1092.
 See also Vieuchange, J.
 Gallien, L., inhibition of sexual cycle in *Rana temporaria* following hypophysectomy, III, 473. Hypophysectomy and establishment of puberty in frog, III, 754. Effects of hypophysectomy on sexual characteristics in frog, III, 754.
 Gallissot, (Mlle.) M. See Michel, A.
 Gallo, U., and Baldini, V., binary system sulphanilamide-thymol, I, 472.
 Gallotti, M. See Pollacci, G.
 Galloway, C. E., photography of the uterine cervix, III, 224.
 Gallup, W. D. See Caskey, C. D.
 Gallut, J. See Bernard, P. N.
 Galopin, R., determination of ore minerals by the imprint method; (use of contact analysis on polished surfaces), I, 584.
 Galperin, S. I., hormonal sterilisation with insulin. II. and III., III, 140, 380.
 Galpin, N., factors affecting hatching weight of brown Leghorn chickens, III, 61.
 Galtsoff, P. S., physiology of reproduction of *Ostrea virginica*. I. Spawning reactions of the female and male, III, 683.
 Galvão, P. E., and Pereira, J., lactic acid oxidation in the brain of B_2 -avitaminous animals, III, 74.
 Gamble, C. J. See Beebe, G. W.
 Gamble, L. See Frediani, H. A.
 Gammo, I. See Kasahara, M.
 Gammon, G. D., Austin, J. H., Blithe, M. D., and Reid, C. G., relation of potassium to periodic family paralysis, III, 748.
 Gammes, T. See Folling, A.
 Gamota, I. See Jerzmanowska, Z.
 Gamow, G., energy-producing reaction in the sun, I, 236. Physical possibilities of stellar evolution, I, 297. Nuclear reactions in stellar evolution, I, 595.
 Gamper, E., cerebral concussion, III, 373.
 Ganapathi, K., chemotherapy of bacterial infections. I. Synthesis of derivatives of sulphanilamide, II, 107. 2:3-Dihydroxytrans-decahydronaphthalenes and the configuration of tetrahydronaphthalene, II, 420. Stereochemistry of pinane and its derivatives, II, 516.
 Ganapathy, C. V., and Sastri, B. N., natural activators of papain, III, 198.
 Papain, III, 940. Oxidation of thiols and ascorbic acid in the latex of papaya, III, 948.
 Ganassini, E., absorption of sulphonal into body fluids, III, 778. Effect of vitamin-B₁ on peripheral nerves, III, 993.
 Gandin, A., absorption of cosmic particles in small thicknesses of lead and copper, I, 351.
 Gandini, A., chlorination of menthane, II, 220. Cineolecarboxylic acids, II, 380. Passerini's reaction [of camphor and terpenes], II, 380.
 Ganeshan, D., aceto-carmin smear technique for cotton cytology, III, 810.
 Ganguli, A., hydrous oxide hydrosols and gels, I, 197.

- Ganguli, N. See Krishnan, K. S.
 Ganguly, H. D. See Bagehi, K. N.
 Ganguly, R. See Ray, S. N.
 Ganguly, S. C., determination of fumaric and maleic acids, II, 194.
 See also Chopra, R. N.
 Ganina, T. N. See Kogan, I. M.
 Gans, F., auto-absorption of the continuous spectrum of xenon excited to give white light; variation of the auto-absorption coefficient with wave-length, I, 440.
 Gant, D. H. T. See Krishnan, R. S.
 Gantt, W. H., testing cortical function and sensitivity of the skin, III, 248.
 Ganz, E., thermal conductivity of liquid helium II, I, 604.
 See also Allen, J. F.
 Gapon, E. N., thermodynamic equation of the adsorption isotherm of two ions, I, 72.
 Adsorption of organic acids by silica gel, I, 72.
 Gapschenko, M. V., micro-titration of lead, I, 535.
 and Scheintzis, O. G., determination of lead in alloys, I, 535.
 Garach, J. See Barchewitz, P.
 Garand, N. D. See Boyd, E. M.
 Garbarino, G., chemical constitution and pharmacological action of cardiac glucosides. I. Technique. II. Toxicity of A-glucosides and digitoxigenin, III, 862.
 and Scultesky, G. V., chemical constitution and pharmacological action of cardiac glucosides. III. Toxicity of deacetyl digitanin-A, -B, and -C, III, 862.
 See also Untersteiner, L.
 Garbatski, U. See Farkas, L.
 Garbe, L. See Steinkopf, W.
 Garber, R. I., formation of elastic twins during twinning of calcite crystals, I, 285.
 Garbutt, H. R. See Hubbard, R. S.
 Garcia, A. See Castellanos, A.
 Gardberg, M., and Olsen, J., electrocardiogram after taking food, III, 821.
 Gardiner, E. M., and Yerushalmy, J., familial susceptibility to stillbirths and neonatal deaths, III, 979.
 Gardiner, R. H. See Zuckerman, S.
 Gardner, E. D., tin deposits of the Black Hills, South Dakota, I, 346.
 Gardner, E. R. See Emel'us, H. J.
 Gardner, F. E. See Brown, N. A.
 Gardner, G. E., prepsychotic measurements of physical and mental growth in case of juvenile dementia paralytica, III, 831.
 Gardner, J. H., and Joseph, L., [coupling organic radicals by means of the Grignard reagent], II, 496.
 See also Bacon, F.
 Gardner, L. U., aetiology of pneumococcosis, III, 316.
 Gardner, M. W. See Tompkins, C. M.
 Gardner, R. E., and Hyde, R. R., biological method for freeing Walker tumour no. 256 from contaminating bacteria, III, 492.
 Gardner, W. J., and Nosik, W. A., quantitative absorption of phenolsulphone-phthalein from subarachnoid space, III, 672.
 Gardner, W. U., oestrogens in carcinogenesis, III, 383.
 See also Leblond, C. P., Pfeiffer, C. A., and Smith, P. K.
 Gardost, D., cells of the intestino-chromaffin system in the amphibian pancreas, III, 269.
 Garkuscha, G. A., preparation and properties of (I) l-abietic acid and (II) d-abietic acid, II, 273.
 Garland, H. G. See Hartfall, S. J.
 Garlock, J. H., differential diagnosis of hyperparathyroidism, III, 256.
 See also Bernheim, A. R.
 Garman, R. L., and Droz, M. E., electron tube direct-current voltmeter, I, 492.
 Garner, Frank Harold, and Sanders, H. G., effect of feeding oils to dairy cows: value of the Latin-square lay-out in animal experimentation, III, 283.
 Garner, W. E., co-operative activation, I, 616.
 and Ham, A. J., combustion of methane, I, 268.
 and Maggs, J., action of ultra-violet radiation on barium and strontium azides, I, 573.
 and Pugh, A., propagation of flame in hydrogen-oxygen mixtures, I, 84.
 and Ward, T., heats of adsorption of gases on oxides of manganese at low pressures and room temperature, I, 366.
 See also Dowden, D. A.
 Garnier. See Lvov, A.
 Garofali, V. See Stolf, G.
 Garrard, E. H., and Lochhead, A. G., relationships between soil micro-organisms and soil-borne plant pathogens, III, 873.
 Garreau, (Mlle.) Y., [interaction of] phenols and sulphites, II, 77. Additive products of diphenols, II, 259.
 Garren, K. H., *Polyporus abietinus*. I. Enzyme-producing ability. II. Utilisation of cellulose and lignin, III, 521.
 Garrett, A. B., solubility of mercuric halides in solutions of potassium halides; character of the mercuric halide complex ions; evidence for polymerisation of mercuric chloride, I, 611.
 and Howell, W. W., equilibria of mercuric oxide in solutions of dilute nitric acid; evidence for stepwise dissociation of bases, I, 472.
 Vellenga, S., and Fontana, C. M., solubility of red, yellow, and black lead oxides and hydrated lead oxide in alkaline solutions; character of the lead-bearing ion, I, 195.
 See also Clark, P. E.
 Garrett, A. W. See Bliss, E. A.
 Garrett, H. E. See Robinson, Conmar.
 Garrido, J., and Fro, R., sulphotellurides of bismuth, I, 286.
 Garrigue, A. See Moog, R.
 Garrigues, R., effect of colchicine and of chloral on roots of *Vicia faba*, III, 534.
 Garrison, E. A. See Fincke, M. L.
 Garrison, M. See Kernwein, G.
 Garry, M. See Montagne, M.
 Garry, R. C., and Garven, H. S. D., new rhythm in skeletal muscle, III, 463.
 See also Davidson, J. N., and Westwater, J. O.
 Garton, W. R. S., vacuum grating spectrograph mounting, I, 626.
 Garven, H. S. D. See Garry, R. C.
 Garvin, C. F., toxic hepatitis due to sulphanilamide, III, 303. Fatal toxic manifestations of thiocyanates, III, 779.
 Garwood, R. F. See Drew, H. D. K.
 Garzuly-Janke, R., reactions of isomeric nitroanilines with hydrogen peroxide in hydrochloric acid solution, II, 15.
 See also Janke, A.
 Gasch, D. J. See Mason, J. P.
 Gascon. See Layani, F.
 Gascón, J., and Scheggia, E. R., clinical determination of blood-cholesterol, III, 452.
 Gasnier, A., and Mayer, A., regulation of nutrition. I. General mechanism. II. Regulatory mechanism in the rabbit. III. Regulatory mechanism and intensity of metabolism. IV. Racial differences. V. Individual differences, III, 991.
 See also Chevillard, L.
 Gaspart, R., and Gillo, L., determination of water in acetone, II, 195.
 and Serrure, G., determination of water in ether, II, 527.
 Gassenmeier, E. See Ruggli, P.
 Gasser, C., pneumococcal types, III, 204.
 Gassmann, A., and Rupe, H., derivatives of 2-aminomethyltetrahydroquinoline and isoquinoline, II, 560.
 Gassmann, A. G. See Hartman, R. J.
 Gassmann, G., temperature-independent negative Faraday effect, I, 511.
 Gassner, G., hard shell in *Robinia* seeds and its removal, III, 533.
 and Franke, Wilhelm, influence of the carbon dioxide content of the air on the nitrogen economy of young wheat leaves, III, 881.
 and Hassebrauk, K., influence of ether- and chloroform-narcosis on reaction of young cereal plants to rust, III, 883.
 Gatenby, J. B., Singh, B. N., and Browne, K. M. R., Golgi apparatus material and the vacuole system in *Euglena* and *Copromonas*, III, 225.
 Gates, M. D., jun. See Fieser, L. F.
 Gates, R. R., blood groups and other features of the Micmac Indians, III, 739.
 Gatet, L., Genevois, L., and Mandillon, G., ascorbic acid in guinea-pig tissues determined by precipitation as the dinitrophenylhydrazones, III, 852.
 Gatovskaja, T. V. See Burshtein, R. C.
 Gatterer, A., and Junkes, J., determination of very small amounts of europium in samarium, I, 536.
 Gatteschi, G., and Rodolfo-Masera, T., blood-sugar level after labyrinthine stimulation, III, 905.
 Gattner, H., effect of brief electric shocks on excitatory process in human sensory nerves, III, 465.
 Gatto, I., action of vitamin-B₁ and -B₂ on water diuresis in children, III, 702.
 Gatty, O. See Dean, R. B.
 Gatz, A. J., cytological relationship between the hypophysis and the germinal epithelium of the testis, III, 47.
 Gaube, R. See Brulé, M.
 Gaubert, P., mobile rings in anisotropic drops of p-azoxyanisole containing a small amount of phenolizdin, I, 61. Mobile rings produced in anisotropic drops of the nematic phase by the addition of an optically active substance, I, 182.
 Gaudin, A. M., and Dicke, G., pyrosynthesis, microscope study, and iridescent filming of sulphide compounds of copper with arsenic, antimony, and bismuth, I, 498.
 and Hamlyn, W. T., pyrosynthesis, identification, and study of tin sulphides and of compounds of tin sulphides with antimony and lead sulphides, I, 286.

- Gaudin, H. J., and Cabot, H., re-establishment of function in the chronically non-functioning kidney following removal of obstruction, III, 274.
- Gaudin, O., and Vacherat, R., rotenone in and piscicidal power of plants of the French Sudan, III, 218.
- Gauducheau, A., artificial biological conditions of civilisation, III, 619.
- Gaunt, R., and Hays, H. W., life-maintaining effect of crystalline progesterone in adrenalectomised ferrets, III, 265. Role of progesterone and other hormones in survival of pseudopregnant adrenalectomised ferrets, III, 580.
- Nelson, W. O., and Loomis, E., cortical hormone-like action of progesterone and non-effect of sex hormones on "water intoxication," III, 265. See also Marazzi, R.
- Gaunt, R. T. See Clark, G. A.
- Gaunt, W. E., and Irving, J. T., influence of calcium and phosphorus intake on tooth formation, III, 701.
- and Wormall, A., immunological and chemical properties of carbobenzyloxy-proteins. I. Serum-globulin and ovalbumin derivatives. II. Insulin derivatives, III, 797.
- Gaupp, R., jun., Hodgkin's disease, III, 891.
- Gaupp, W. See Grube, G.
- Gause, G., treatment of post-operative vomiting with "peremesin," III, 864.
- Gause, G. F., toxic action of optical isomers on protozoa, III, 791.
- Gauss, C. J., local and general treatment of female gonorrhoea, III, 178.
- Gautheret, R., possibility of indefinitely culturing carrot tissues, III, 437. Effect of β -indolylacetic acid on the tuber tissues of the carrot, III, 535. Measurement of growth of carrot tissue *in vitro*, III, 798. Action of β -indolylacetic acid on carrot tissue cultures, III, 882. Oxidation-reduction potential of culture media containing vital dyes in presence of yeasts, III, 941. Effect of *Saprolegnia diclina* on oxidation-reduction potential of culture media with added dyes, III, 942. See also Guilliermond, A., and Plantefol, L.
- Gautier, J. A., action of bromine on *N*-substituted 2-pyridones, II, 280. Colour reaction for the detection and determination of small quantities of β -naphthol, II, 464.
- Gautier, T. N., and Williams, Dudley, effects of alkali halides on the 4-7 μ . water band, I, 597.
- Gautrelet, J., and Corteggiani, E., liberation of acetylcholine from brain tissue *in vitro* under the influence of venoms from cobra and *Vipera aspis*, lyso-cithin, and saponin, III, 1038.
- and Scheiner, H., determination of anticholine-esterase action by relaxation of the right muscle of the frog's abdomen contracted by acetylcholine, III, 1008. See also Carayon-Gentil, A., and Corteggiani, E.
- Gauzit, J. See Cabannes, J.
- Gavankar, K. D. See Hirwe, N. W.
- Gavat, I. See Nemitzescu, C. D.
- Gavaudan, N. See Gavaudan, P.
- Gavaudan, P., and Gavaudan, N., action of substances inhibiting karyokinesis, III, 637.
- Gavaudan, P., and Gavaudan, N., mitosis-inhibiting effect of apioles on radicular meristems of *Triticum vulgare*, III, 1018.
- Gavaudan, N., and Durand, J. F., polyploidy in the somatic cells of Gramineae due to acenaphthene vapour, III, 340. Effect of naphthalene and diphenyl on karyokinesis, III, 534. Effect of hydrocarbons and their derivatives on mitosis, III, 637. Similar effect of acenaphthene and colchicine on karyokinesis, III, 740. Anomalies in karyokinesis and cytodieresis produced by 1-chloronaphthalene and *p*-dichlorobenzene, III, 883. Anomalies in karyokinesis and cytodieresis produced by naphthalene and β -naphthyl ethers, III, 883. See also Bégner, J., and Vandendries, R.
- Gavey, C. J., and Parkinson, J., digitalis in heart failure with normal rhythm, III, 613.
- Gavigan, A. J. See Cottingham, F.
- Gavin, G. See McHenry, E. W.
- Gavrila, J. See Goia, J.
- Gavrilov, N. I., and Koperina, A. V., reduction of certain amides and substituted amides. I. Electro-reduction of cyclopeptide and open peptide groups, II, 535. and Ginzburg, E. I., colorimetry of the biuret reaction, III, 222.
- Paradachvili, A. I., and Govorov, A. I., spectrophotometric study of the biuret reaction in investigations into structure of proteins. I, II, 294.
- Gavrilov, W., heredity in immunity to radium-produced sarcomata in the guinea-pig, III, 70. See also Berghe, L. van den.
- Gawinska, (Mme.) H. See Tokarski, J.
- Gawronski, S., radioactivity of glass, porcelain, and mica, I, 292.
- Gawrych, G., structure of pale yellow crystalline basic mercuric chloride, $\text{HgO}_2\text{H}_2\text{GCl}$, I, 12. X-Ray study of potassium chlorochromate, KCrO_3Cl , I, 513.
- Gay, R., determination of electrometric equivalence points, I, 492.
- Gay, L. N. See Keeney, E. L., and Rienhoff, W. F.
- Gayet, R., Cuny, L., and Quivy, D., comparative value of different rat tests for evaluation of extracts of urine of pregnancy, III, 143. Ratio of genital-weight to body-weight in immature rats, III, 145. See also Rivoire, R.
- Gayler, M. L. V., and Sutherland, E. G., constitution of aluminium-zinc alloys of high purity: nature of the thermal change at 443°, I, 69.
- Gayus, I. K., Armytage, V. B. G., and Baker, J. K., puerperal agranulocytosis following sulphanilamide, III, 1027.
- Gdanov, A. See under Shdanov, A.
- Gebauer, A. See Mayr, C.
- Gebauer, R., new effect in asymmetry of radiation from hydrogen positive rays in an electric field, I, 292.
- Gebhardt, E. See Koster, W.
- Gebhardt, H., potassium chlorogenate-caffeine complex, III, 189. Caffeine-potassium chlorogenate, III, 862.
- Gebhart, A. I. See Whitmore, W. F.
- Geblewicz, E., spatial summation of thermal stimuli, III, 669.
- Gee, G., Davies, C. B., and Melville, H. W., catalysed polymerisation of butadiene at a liquid-gas interface, I, 619. See also Cuthbertson, A. C.
- Geeslin, L. E. See Cleckley, H. M.
- Geffcken, W., attack of alkaline solutions on glass and its dependence on dissolved ions. I, I, 138. Christiansen dispersion filters for monochromators giving a bright and sharply defined beam, I, 159.
- Géhéniau, wave mechanics of the heavy electron, I, 118. See also De Donder, T.
- Gehlen, H., reaction between nitric oxide and metallic sodium, I, 155.
- Gehlen, K. See Baukloh, W.
- Gehrts, A., process of electron liberation from incandescent solid bodies, from electron-optical investigations, I, 544.
- Geib, K. H., exchange of hydrogen ions between hydrogen sulphide and methyl alcohol, I, 615. See also Bok, L. D. C., and Bonhoeffer, K. F.
- Geiger, A., glycolytic activity of brain. II. Effect of cytolysis; presence of a glycolytic inhibitor, III, 750. and Magnes, J., glycolytic activity of brain. I. Macerated brain tissue, III, 750. See also Dam, H., and Karrer, P.
- Geiger, E., action of "methadren" (*r*-*N*-methyladrenaline), III, 411. and Vargha, L., new mercurial diuretic [dilurgen], III, 614.
- Geiger, M., and Barrentine, B. F., isolation of active principle in *Claviceps paspali*, III, 725.
- Geiger, W. B., jun., and Anderson, R. J., *Phylomonas tumefaciens*. I. Lipins; composition of the phosphatide, III, 942.
- Geigl, E. See Rumpf, E.
- Geiling, E. M. K., and Cannon, P. R., pathologic effects of elixir of sulphanilamide (diethylene glycol) poisoning, III, 176. See also Oldham, F. K., and Teague, R. S.
- Geill, T. See Andersen, F.
- Geilsdorf, F. See Vollbrecht, H.
- Geiringer, M., synergic action of adrenaline and thyroxine on the colour changes of amphibia and fish and larval metamorphosis, III, 260. Partition of blood groups in mixed marriages, III, 814.
- Geissler, J., acute haematoporphyrinuria [with Landry's paralysis], III, 666.
- Geissman, T. A., and Koelsch, C. F., reactions and enolisation of cyclic diketones. III. 1:2-Diketo-3:4-diphenylcyclopentene. IV. 1:2-Diketo-3:4:5-triphenylcyclopentene, II, 118. and Mallatt, R. C., reaction between hexabromobenzene and magnesium phenyl bromide, II, 412. See also Adams, R.
- Geist, S. H., Salmon, U. J., and Gaines, J. A., testosterone propionate in functional bleeding, III, 268.
- Salmon, U. J., and Mintz, M., effect of oestrogenic hormone on contractility of the Fallopian tubes, III, 56. See also Salmon, U. J.
- Geitler, L. von, spiral structure of somatic chromosomes, III, 2.
- Gelbart, A., and Mochan, I., effect of atomic hydrogen on synthesis of ammonia under positive-ion impact, I, 35.

- Gelfand, H. H., Flamm, G., and Heifitz, A. J., analysis of sediment of pollen extract obtained by vacuum filtration; its questionable specific excitant activity, III, 935.
- Geller, R. F., and Bunting, E. N., system $PbO-B_2O_3-SiO_2$, I, 566.
- Gellhorn, E., effects of hypoglycæmia and anoxia on the central nervous system, III, 250.
- and Darrow, C. W., action of metrazol on autonomic nervous system, III, 832.
- and Steck, I. E., effect of gases with low oxygen and increased carbon dioxide tension on peripheral blood flow in man, III, 362.
- See also Darrow, C. W., Ingraham, R. C., and Ury, B.
- Gelman, A., mixed platinum dichlorodiammines possessing a *cis*-configuration, I, 334. Complex compounds of platinum and butadiene (divinyl), I, 533. Stability of co-ordinated ethylene hydrocarbons, II, 95.
- See also Tscherniaev, I. I.
- Gelman, I., and Braun, S., vascular response to amyl nitrite and histamine at different ages, III, 655.
- Gelman, R. M. See Koldaev, B. M.
- Geloso, M., rapid electro-analysis of copper, I, 488.
- and Deschamps, P., potentiometric investigations on cathodic deposition of copper in presence of iron salts, I, 424.
- Gelperin, J. See Spies, T. D.
- Gelsdorf, drug treatment of bronchial asthma, III, 565.
- Gemant, A., cataphoresis in insulating media, I, 418.
- and Whitehead, S., thermal instability of dielectrics for alternating voltages when the loss angle is dependent on the field strength, I, 356.
- Gemassmer, A. See Suida, H.
- Gemeinhardt, K., thiocyanate contents of plants, III, 215.
- Gemelli, A., individual variations in speech and their electro-acoustical demonstration, III, 460. Structure of vowels, III, 460.
- Gemert, A. G. M. van, counter systems for measuring cosmic radiation of very small intensity, I, 44.
- See also Clay, J., and Clay, P. H.
- Gemmell, A. A., unusual congenital abnormality of vagina, III, 442.
- Gempp, A. See Schlemmer, F.
- Genders, R., and Harrison, R., niobium-iron alloys, I, 517.
- Gendre, H., appearance and localisation of glycogen in striped muscle, III, 242.
- Genell, S., action of magnesium ions on the movements of the isolated uterus, III, 89.
- Genevois, L., and Cayrol, P., action of aldehydes on thiol-amino-compounds, II, 410.
- See also Espil, L., Flavier, H., and Gatet, L.
- Genevray, J., and Bruneau, J., peptone water containing a high proportion of salt as a medium for isolation of the cholera vibrio, III, 207.
- Genin, I. L. See Konikov, A. P.
- Genkina, R. I. See Elkenbard, A. G.
- Genna, G. E., inheritance of blood groups, III, 551.
- Gennari, G., fluid of serous renal cysts, III, 915.
- Gentile, G., representation of the Lorentz group and Dirac's theory of the electron, I, 547.
- Gentner, W., and Segrè, E., calibration of the ionisation chamber, I, 350.
- See also Bothe, W.
- Gentzen, G., and Moir, T., relation of vitamin-B₁ and thyroid gland, III, 41.
- Genuit, H., determination of the capacity for binding drugs in a closed coronary circulation with minimal volume of fluid, III, 183.
- George, S. W. See Kenny, T. S.
- Georgesco, I. D., and Companetz, V., measurement of p_H in circulating venous blood, III, 963.
- Georgi, C. E., and Beguin, A. E., heteroauxin production by efficient and inefficient strains of *Rhizobia*, III, 428.
- Georgi, F., convulsions and insulin therapy. I. Aspects of clinical and humoral pathology, III, 131.
- and Strauss, R., convulsions and insulin therapy. II. Meduna's method, III, 131.
- See also De Morsier, G.
- Georgievskaja, L. M., Petrunkina, A. M., and Petrunkin, M. L., mineral composition of grey matter of human brain, III, 573.
- Gerard, R. W., anoxia and neural metabolism, III, 573.
- and Tupikova, N., creatine in nerve, muscle, and brain, III, 296. Nerve and muscle phosphates, III, 369.
- See also Dubner, H. H., Libet, B., and Sugar, O.
- Gerasimov, J. I., and Tschunichina, I. K., synthesis and analysis of vanadium sulphides, I, 532.
- Gerasimovski, V. I., chkalovite, I, 437.
- Géraudel, E., electrocardiographic observations during the cardiazol treatment of schizophrenia, III, 236.
- Gerbay, F. See Graber-Duvernay, J.
- Gerbeau, C. See Rimattel, F.
- Gerbeaux, J. See Routier, D.
- Gerber, I. E., and Bernheim, A. I., morphological study of the reactivity of mouse sarcoma 180 to bacterial filtrates, III, 159.
- Gerber, L. S. See Norris, E. H.
- Gerber, M. J. See Blat, E. J.
- Gerbi, C., and Gualtierotti, T., hydration of serum-proteins in normal and pathological conditions, III, 232.
- Gerbis, H., caisson disease, III, 968.
- Gerding, H., and Freymann, R., mixtures of methyl alcohol and carbon disulphide (binary system with two liquid phases) and methyl alcohol and carbon tetrachloride (miscible in all proportions); infra-red absorption spectra, I, 252.
- and Karsten, J. G. A., Raman spectra of α - and β -trithioacetaldehyde and of monothioacetaldehyde, I, 403.
- and Lecomte, J., infra-red absorption spectra of acetaldehyde, paraldehyde, α - and β -trithioacetaldehyde, I, 402.
- Infra-red absorption spectrum of gaseous and liquid sulphur trioxide, I, 509.
- and Rijnders, G. W. A., Raman spectra of acetaldehyde and paraldehyde, I, 403.
- Gerebtzoff, M. A., localisation of cortical ataxias, III, 468. Effect of stimulation of labyrinth on electrical activity of cerebral cortex, III, 970.
- Gerecs, A. See Zemplén, G.
- Gergely, K., antagonism between vitamin-C and follicular hormone, III, 166.
- Gerhard, H. See Bruchhausen, F. von.
- Gerhardt, K., determination of free and combined pentoses in purine compounds, II, 134.
- Geriola, F., and Mesina, R., capillary and venous blood-sugar during hyperinsulinism, III, 477. Fall in respiratory quotient during hypoglycæmia due to insulin, III, 477.
- Gerlach, W., ferromagnetic transformations; problem of the Curie temperature, I, 186.
- See also Bittel, H.
- German, B. See Fox, C. L., jun.
- German, W. L., and Jamsett, R. A., ionisation in non-aqueous solvents. II. Formation of certain amines, I, 565.
- German, W. M., Hortege's silver impregnation stains, III, 545.
- Germer, L. H., electron diffraction rings produced by hydroxide contamination, I, 359. Electron diffraction studies of thin films. I. Structure of very thin films, I, 513.
- and Storks, K. H., rubbed films of barium stearate and stearic acid, I, 316.
- Gernez, C., Breton, A., and Driessens, J., pulmonary lesions produced by vagotomy, III, 898.
- Gernez, L., protective action of human serum at different sexual stages against anaphylactic shock, III, 980.
- Géro, E. See Giroud, A.
- Gero, L., and Lorinczi, K., rotation analysis of the $\alpha^2\Sigma^+ \rightarrow \alpha^2\Pi$ CO bands, I, 548.
- and Schmid, R., dissociation schemes of diatomic hydrides and deuterides, I, 183. Completion of term system for carbon monoxide, III, I, 448.
- and Szabo, F., structure of the triplet bands ($d^2\Pi$ $\alpha^2\Pi$) of carbon monoxide, I, 508.
- Gerovich, M., Frumkin, A., and Vargin, D., dipole moment and surface potentials, I, 74.
- Gerrard, E. A., severe ulceration of vulva and vagina during pregnancy treated with vitamins, III, 399.
- Gerrard, W., esters of sulphurous, chlorosulphinic, and chlorosulphonic acids, I, II, 97.
- Gersch, M., the "lipoid model" of Nirenstein in vital staining of *Paramecium* with p_H and r_H indicators, III, 741.
- Gerschman, R. See Foglia, V. G.
- Gerschpacher, H., selective propagation of *Streptococcus agalactiae* and *Brucella*, III, 527.
- Gershtein, M. M. See Novoselova, A. V.
- Gershtein, N. A., acetylene chlorohydrins and their corresponding dioxides and erythritols, II, 354.
- Gersdorff, C. E. F. See Jones, D. B.
- Gersdorff, W. A., effect of introduction of nitro-group into the phenol molecule on toxicity to goldfish, III, 1090.
- Gersh, I., and Black, W. C., histology of cutaneous reaction to *Brucella melitensis* antigen, III, 525.
- and Grollman, A., kidney function in adrenal cortical insufficiency, III, 478.
- Gersh, M., vital staining as a method of analysing physiological processes; *Paramecium caudatum*, III, 327.
- Gershberg, H., skin transplantation between hairless and haired rats, III, 1061.
- Gershenfeld, L., *o*-toluidine and *p*-toluidine tests for occult blood, III, 453.

- Gershon-Cohen, J. See Shay, H., and Thalheimer, E. J.
- Gerstel, G., dust-affected lungs. III. Aluminium oxide content of lungs in 128 cases, III, 94.
- Gerstenberg, H. W. See Meythaler, F.
- Gerstenberger, H. See Hahn, A.
- Gerstner, K., and Stöger, R., action of colloidal silicic acid on white cells, III, 812.
- Gertler, W., uleron and gonorrhœa, III, 83.
- Gertrude, M. T. See Combes, R.
- Geschickter, C. F., mammary carcinoma in the rat with metastasis induced by oestrogen, III, 383.
- Gessell, A., tonic neck reflex in the human infant; morphogenetic and clinical significance, III, 30. Reciprocal interweaving in neuromotor development, III, 830.
- Gesink, A., simplified Eck fistula technique, III, 485.
- Gessaga, V. See Cavalli, F.
- Gessner, E. See Theilacker, W.
- Gessner, F., relation between light intensity and assimilation in submerged plants, III, 436.
- Getman, F. H., Ira Remsen, I, 583.
- Gettler, A. O., and Ellerbrook, L., toxicology of fluorides, III, 866.
- and Fine, J., distillation capillary, I, 582.
- Getz, H. R., Hildebrand, G. B., and Finn, M., vitamin-A deficiency in normal and tuberculous persons, III, 765.
- Getzowa, S., and Halpern, L., tonic phenomenon in pigeons with beri-beri, III, 572.
- Geweher, R. See Fischer, W.
- Gex, (Mlle.) M. See Vilès, F.
- Geyer, B. P. See Haendler, H. M.
- Ghalioungui, P. See Alport, A. C.
- Ghelelovitch, S., effect of fasting on metamorphosis of *Galleria mellonella*, III, 543. Variability produced in bacteria irradiated with radon, III, 947.
- Gheorghiu, A. See Claudatus, I.
- Gheorghiu, C. V., and Matei, V., phototropism of semicarbazones and phenylhydrazones of ethylenic ketones. IV., II, 480.
- Gheorghiu, G. N., isomerisation of 2:2-disubstituted indanediones, II, 270.
- Gheorghiu, P. See Kauffmann-Cosla, O.
- Gheorghiu, T. D. See Aubert, M.
- Ghermani, A. See Claudian, I.
- Gherscovici, I. See Ballif, L.
- Gherzi, R. A. C., preparation of aluminium carbide, I, 210.
- Ghetie, V., preparation and length of epididymis of the horse and pig, III, 805.
- Gheury de Bray, M. E. J., interpretation of the red shifts of the light from extragalactic nebulae, I, 589.
- Ghibaudi, A. J. See Zerbini, C. V.
- Ghika-Budesti, S., petrographic character of the eruptive series of Jebel Sarro, Moroccan AntiAtlas Mts., I, 107.
- Ghioldi, C. See Corbellini, A.
- Ghiron, D., sulphides obtained by decomposition of the corresponding thio-sulphates, I, 12.
- and Monticelli, M., arsenophosphoric and arsenoarsenic acids; solubility of monomeric arsenious anhydride in monobasic phosphates and arsenates, I, 21.
- Ghitulescu, T. P., metalliferous deposits in the region of curvature of the eastern Carpathians, I, 342.
- and Giuşca, D., mineralisation of the deposits of Bucium, Alba District, I, 346.
- Ghosh, B., changes of blood-lipins of normally fed and vitamin-C-deficient guinea-pigs, III, 604. Vitamin-C and toxins. III. Effect of diphtheria toxin on vitamin-C metabolism, III, 922.
- Ghosh, B. N., and Chowdhury, D. K., enzymes in snake venom. IV., III, 323.
- and De, S. S., proteins of rattlesnake venom, III, 597.
- De, S. S., and Bhattacharya, D. P., isolation of active principles from the venoms of *Bungarus fasciatus* and *Vipera russelli*, III, 616.
- Dutt, P. K., and Chowdhury, D. K., enzymes in snake venom. V. Detection of dipeptidase, polypeptidase, carboxypolypeptidase, and esterase in different snake venoms, III, 722.
- and Roy, N. N., Danyasz phenomenon in diphtheria toxin-antitoxin mixtures, III, 629.
- Ghosh, J. C., production of optically active substances and metallic films of silver, platinum, and palladium by means of circularly polarised light, I, 339.
- and Banerjee, T., mechanism of photochemical reactions with inorganic colloids; influence of light in different states of circular polarisation, I, 257.
- and Rakshit, P. C., physico-chemical properties of ascorbic and dehydroascorbic acid, II, 98.
- Ghosh, K. See Das, S. R.
- Ghosh, S. See Chopra, R. N.
- Ghosh, S. K. See Qudrat-i-Khuda, M.
- Ghosh, T. N., and Das-Gupta, D., pyrazole derivatives, II, 286.
- Giacalone, A., surface activity. II. Geometrical isomerides, I, 368. Semi-micro-determination of halogens in organic substances, II, 462.
- and Di Maggio, D., surface activity of antipyrine and of its 4-alkyl derivatives, I, 317.
- See also Oliveri-Mandalà, E.
- Giacchero, R. See Zoccoli, A. G.
- Giacomello, G., structure of triterpenes, II, 29.
- See also Caglioti, V.
- Giaja, J., apparatus for measuring the gaseous exchange of yeasts, III, 221. Homœothermie et thermorégulation. I. L'homœothermie. II. La thermorégulation, III, 277.
- Gianasso, R., formulæ for calculating compressibility and thermal expansion, I, 515.
- Giangrasso, G., experimental application of sheet rubber as a plastic. I. Articular lesions. II. Meningitic lesions. III. Nervous lesions. IV. Tendinous lesions, III, 192.
- Giannini, R., appearance of the capillaries during acrocyanosis, III, 124.
- Gianturco, C. See Steggerda, F. R.
- Giauque, W. F., proposal to redefine the thermodynamic temperature scale, I, 372.
- and Powell, T. M., chlorine; heat capacity, vapour pressure, heats of fusion and vaporisation, and entropy, and Ruehrwein, R. A., entropy of hydrogen cyanide; heat capacity, heat of vaporisation, and vapour pressure; hydrogen bond polymerisation of the gas in chains of indefinite length, I, 602.
- Giauque, W. F., and Stout, J. W., magnetic flux distribution when a cylinder of constant permeability is placed in a homogeneous field; magnetic susceptibility of gadolinium oxide at low temperatures, I, 408.
- Stout, J. W., and Barreau, R. E., measurements of viscosity of liquid helium. II., I, 249.
- See also Powell, T. M., and Ruehrwein, R. A.
- Gibbon, J. H., jun., oxygenator with large surface volume ratio, III, 899.
- Gibbons, R. C. See Parton, H. N.
- Gibbons, R. J., laboratory of hygiene, III, 619.
- Gibbs, D. F., and Thomson, G. P., possible delay in the emission of neutrons from uranium, I, 545.
- Gibbs, E. L. See Gibbs, F. A.
- Gibbs, E. M., and Henry, T. A., modified cinchona alkaloids. VI. Niquidine. VII. Constitution of niquidine, II, 187, 489.
- Gibbs, F. A., Gibbs, E. L., and Lennox, W. G., likeness of the cortical dysrhythmias of schizophrenia and psychomotor epilepsy, III, 130. Influence of blood-sugar level on wave and spike formation in petit mal epilepsy, III, 831.
- See also Grass, A. M., and Williams, D. J.
- Gibelli, C., immunising properties of plants, III, 341.
- Gibson, C. S. See Brain, F. H., Irwin, D. A., and Kirk, P. L.
- Gibson, G. P., simple valve for use in laboratory apparatus, I, 626.
- Gibson, J. G. See Thomson, K. J.
- Gibson, J. G., jun., changes in blood volume in pernicious anæmia in relation to hæmatopoietic response to intramuscular liver therapy, III, 812.
- and Blotner, H., determination of ethyl alcohol in blood and urine with the photo-electric colorimeter, III, 120.
- and Harris, A. W., blood volume in hyperthyroidism and myxœdema, III, 352.
- and Robinson, R. W., blood volume, cardiac size, and renal function in dogs with hypertension produced by Goldblatt technique, III, 365.
- See also Harris, A. W.
- Gibson, K. S., and Keegan, H. J., calibration of recording spectrophotometer, I, 43.
- Gibson, R. B. See Greene, J. A.
- Gibson, R. E., effect of pressure on solubility of solids in liquids, I, 194.
- and Loeffler, O. H., pressure-volume-temperature relations in solutions. I. Solutions of benzene and its derivatives. II. Energy-volume coefficients of aniline, nitrobenzene, bromobenzene, and chlorobenzene. III. Thermodynamic properties of mixtures of aniline and nitrobenzene, I, 192, 558, 605.
- Gibson, S., and Clifton, W. M., congenital heart disease; clinical and post-mortem study of 105 cases, III, 1031.
- Giedosz, B., effect of vitamin-B₂ on the thyroid gland, III, 164. Vitamin-B₂ and endocrine glands, III, 165. Sensitisation of the gonadotropic hormone by vitamin-C, III, 166. Effect of vitamin-E on histological structure of the endocrine glands, III, 169. Activation of gonadotropic hormone by ascorbic acid, III, 474.

- Giedosz, B., extrahypophyseal system and the ovaries; [influence of luminal on gonadotropic hormone], III, 576.
See also Elmer, A. W.
- Giedroyć, W. See Przyłeki, S. J. von.
- Giese, A. C., effects of ultra-violet radiation of $\lambda 2537 \text{ \AA}$. on cleavage of sea-urchin eggs, III, 347. Nuclear and cytoplasmic effects of ultra-violet light, III, 718.
- Giesecke, F., and Rathje, W., Siemens and Zeiss apparatus for spectrophotometric determination of potassium in plant ash, III, 341.
- Giesecke, L. See Kollath, W.
- Gieseking, J. E., mechanism of cation exchange in the montmorillonite-beidellite-nontronite type of clay minerals, I, 498.
- Gifford, S. R., and Bellows, J. G., histologic changes in lens produced by galactose, III, 752.
- Gigante, G., percentage loss in body-weight during starvation with fatal termination, III, 397.
- Gigli, G., blood-chloride in normal man, III, 963.
- Gigon, A., and Noverraz, M., blood-bilirubin and lipochromes, III, 9. Detection of war gases, III, 1090.
- Gilbert, E. C. See Corruccini, R. J.
- Gilbert, W. I., Turkevich, J., and Wallis, E. S., catalytic *cis-trans*-isomerisation and restricted rotation of diphenyl derivatives, II, 139.
- Gilchrist, M. L., and Buxton, L. H. D., relation of finger-nail growth to nutritional status, III, 956.
- Gildersleeve, N. See Holmes, J. W.
- Gildow, E. M., Fourt, D. L., and Shaw, A. O., sulphaniilamide in treatment of streptococcal mastitis, III, 502.
and Terrill, C. E., artificial insemination of ewes with transported semen, III, 142.
- Gileva, Z. M. See Volkova, M. I.
- Gill, A. M., vitamin-resistant rickets, III, 605.
See also Bennett, T. I.
- Gill, P. M., and Lehmann, H., factors influencing formation of Robinson ester from glycogen and inorganic phosphate in muscle extract, III, 856.
- Gill, P. S., long-period variations of cosmic rays, I, 236. Cosmic rays on the Pacific Ocean, I, 445. Time distribution of cosmic-ray bursts, I, 594.
See also Jesse, W. P.
- Gill, R. E., Hirst, E. L., and Jones, J. K. N., constitution of the mucilage from the bark of *Ulmus fulva* (slippery elm mucilage). I. Aldobionic acid obtained by hydrolysis of the mucilage, II, 495.
- Gillam, A. E., and Hey, D. H., absorption spectra and structure of compounds containing chains of benzene nuclei, I, 449.
See also Carter, G. P.
- Gillan, R. V., ophthalmoscopic findings in hypertension, III, 561.
- Gillert, E., toxic range of poison gases, III, 1090.
- Gillespie, D. T. C., and Macbeth, A. K., reactions of $\alpha\beta$ -unsaturated cyclic aldehydes and ketones. V. *dl*-Cryptone and *cis*- and *trans-dl*-cryptol, II, 545.
- Macbeth, A. K., and Swanson, T. B., reactions of $\alpha\beta$ -unsaturated cyclic aldehydes and ketones. III. Reduction of cryptone; *cis*- and *trans*-dihydrocryptol, II, 17.
See also Cooke, R. G.
- Gillespie, J., separation of gases by thermal diffusion, I, 463.
- Gillespie, J. B., and Rogers, J. C. T., adynamic ileus of new-born, III, 842.
- Gillespie, J. E. O. N., cardiazol convulsions, III, 374.
- Gillespie, L. J., and Downs, W. R., palladium-deuterium equilibrium, I, 565.
- Gillespie, R. D., narcosis therapy: critical review, III, 671.
- Gillespy, T. G., *Byssosclamyx fulva*, II, III, 872.
- Gillet, A., Pirlot, A., and Monfort, F., peptisation of "oleocarbons" in benzene solution by organic acids, I, 24.
- Gillies, A. See Sandin, R. B.
- Gilligan, D. R., and Altschule, M. D., rate of attainment of diffusion equilibrium for thiocyanate between plasma and transudates following the intravenous injection of sodium thiocyanate in patients with oedema, III, 965.
- Gilliland, E. R., Lukes, R. V., and Scheeline, H. W., physical properties of hydrocarbons and their mixtures, I, 371.
- Seebold, J. E., FitzHugh, J. R., and Morgan, P. S., reactions of olefines with solid cuprous halides, I, 531.
See also Scheeline, H. W.
- Gillings, D. W. See Freundlich, H.
- Gillis, L. See Vaillant, C.
- Gillman, J., and Smyth, G. S., hormonal content of the human luteal follicle of pregnancy determined by effect on perineum of baboon, III, 1056.
and Stein, H. B., quantitative inhibition of oestrone by progesterone in the baboon, III, 686.
- Gillman, S. W., and Parfitt, D. N., technique and complications of insulin therapy [of psychoses], III, 250.
See also Wilson, R. S.
- Gillo, L. See Gaspard, R., Timmermans, J., and Zunz, E.
- Gillod, P. See Boutry, G. A.
- Gilman, A., and Goodman, L., pituitrin anemia, III, 676.
See also Bach, N.
- Gilman, H., and Apperson, L. D., reactions between organo-lead compounds and some metallic halides, II, 397.
and Bailie, J. C., relative reactivities of organometallic compounds. XXI. Organolead radicals and derivatives, II, 233.
and Bebb, R. L., relative reactivities of organometallic compounds. XX. Metallation, II, 131.
- Cheney, L. C., and Willis, H. B., dibenzfuran. IX. Metallation of some derivatives, II, 276.
- and Ford, G. M., high mol. wt. fatty acid derivatives. I. Characterisation of acids, II, 563.
- and Jacoby, A. L., dibenzthiophen: orientation and derivatives, II, 33.
- Jacoby, A. L., and Pacevitz, H. A., relative reactivities of organometallic compounds. XVIII. Selective metallations of dibenzthiophen, II, 33.
- Jacoby, A. L., and Swislowky, J., dibenzfuran. X. Aminohydroxy-derivatives, II, 276.
- and Jones, R. G., relative reactivities of organometallic compounds. XXVII. Thallium triphenyl, II, 461.
- Langham, W., and Jacoby, A. L., metallation as a side reaction in the preparation of organolithium compounds, II, 131.
- Gilman, H., and Lichtenwalter, M., tetramethylplatinum and hexamethyldiplatinum, II, 53. Relative reactivities of organometallic compounds. XXV. Coupling reaction with halides of group VIII metals, II, 253.
and Nelson, J. F., relative reactivities of organometallic compounds. XXIII. Allylic rearrangements. XXIV. Reaction rates of benzoyl halides with mercury-di-*p*-tolyl, II, 233.
and Towne, E. B., relative reactivities of organometallic compounds. XXII. Hydrogen chloride cleavage rates of *p*-anisyl-2-furyl lead compounds, II, 233.
and Turck, J. A. V., jun., Friedel-Crafts reactions: *n*-octadecylbenzene and diacylations, II, 147. Orientation in the furan series. XI. Cleavage-rearrangements in Friedel-Crafts reactions, II, 172.
- Van Ess, M. W., and Hayes, D. M., dibenzfuran. VIII. Heteronuclear substitution, II, 222.
- and Van Ess, P. R., dibenzfuran. XI. Substituents in the 4-position, II, 440.
- Willis, H. B., and Swislowky, J., dibenzfuran. XII. Metallation of bromoderivatives, II, 440.
- Yablunsky, H. L., and Svigoon, A. C., relative reactivities of organometallic compounds. XXVI. Interconversion of bismuth and alkali metals, II, 350.
See also Coleman, George H., Pacevitz, H. A., and Setzer, W. C.
- Gilman, S., treatment of dangerous reactions to novocaine, III, 508.
- Gilmour, D., micro-analysis of gases; apparatus for use in a dry method of analysis for carbon dioxide and oxygen, I, 44.
- Gilmour, J. R., normal histology of the parathyroid glands, III, 377.
See also Crooke, A. C., and Fisher, J. H.
- Gilmour, W. See Neil, J. H.
- Gils, G. E. van, composition of the parotid secretion of *Bufo melanostictus*, III, 61.
- Gilson, A. S., jun., agents causing cardiac supernormality, III, 1030.
- Giltner, L. T. See Schoening, H. W.
- GIN, S. Y. See Platt, B. S.
- Gindin, L. G. See Iljinski, M. A.
- Gineste, P. J. See Carrière, G., Debeyre, A., and Morel, J.
- Gingold, N., and Comsa, G., acute severe haemolytic anemia with a leukæmoid blood picture produced by drugs, III, 811.
- Gingrich, N. S., and Wall, C. N., structure of liquid potassium, I, 552.
See also Thomas, C. D.
- Ginnings, D. C. See Osborne, N. S.
- Ginnings, P. M., and Coltrane, D., aqueous solubility of $\beta\beta$ -trimethylpentan- γ -ol, I, 194.
and Hauser, M., aqueous solubilities of isomeric heptanols, I, 20.
- Herring, (Miss) E., and Coltrane, D., aqueous solubilities of unsaturated alcohols, I, 314.
- Ginsberg, E. See Marvel, C. S.
- Ginsberg, J. E., Stewart, C. D., and Becker, S. W., cutaneous sensitisation studies. II. Gross and microscopic changes in ragweed and 2,4-dinitrochlorobenzene sensitisation of guinea-pigs and in poison ivy sensitisation of human beings, III, 1005.
- Ginsberg, V. See Plotz, M.

- Ginsburg, I. W. See Durant, T. M.
- Ginsel, L. A., ultra-violet absorption of sheep thyroglobulin, III, 621.
- Ginzberg, E. I. See Gavrilov, N. I.
- Ginzburg, J. I., properties and preparation of phenylallene, II, 253.
- Ginzburg, M. See Goldstein, B.
- Ginzton, L. L. See Carr, J. L.
- Giordan, P. See Bergeret, P.
- Giordano, A. S., and Carlson, B. G., non-specific substance in guinea-pig serum fixed by antigen in the Wassermann test, III, 631.
- Wilhelm, A. M., and Carlson, B. G., comparison of the Mazzini flocculation test and the Kline exclusion test [for syphilis], III, 631.
- Wilhelm, A., and Prestrud, M. C., serum-phosphatase in differential diagnosis of obstructive jaundice, III, 594.
- Giordano, G. B., physiological myoclonus during sleep produced by hypnotics, III, 312.
- Giovanazzi, J. G. See Cates, H. B.
- Giovanni, Z., treatment of barbituric coma, III, 863.
- Girard, A. See Levaditi, C., and Sandulesco, G.
- Girard, M. See Caroli, J.
- Giraud, P. See Chevallier, A.
- Giraud-Costa, E., and La Tour, D., effect of irradiation of carotid sinus on blood pressure, III, 966.
- See also Cornil, L.
- Giraut-Erler, L., theory of differential potentiometric titration, I, 383. Theory of differential potentiometric titration of acids and weak bases, I, 383.
- Giri, K. V., interaction of vitamin-C and tissue phosphatases, III, 424.
- and Doctor, N. S., pyrophosphate in the determination of vitamin-C content of plant and animal tissues, III, 76.
- Giroud, A., vitamin-C requirements, III, 603.
- and Géro, E., ascorbic acid content of tissues; different forms of ascorbic acid, III, 922.
- Leblond, C. P., Ratsimamanga, R., and Géro, E., realisation of the normal ascorbic acid value in the guinea-pig, III, 76. Normal ascorbic acid content [of animal tissues], III, 76.
- Rabinowicz, M., and Hartmann, E., realisation of the normal ascorbic acid value in man, III, 76.
- and Santa, N., relationship between ascorbic acid content and stimulation of adrenal medulla, III, 852.
- See also Randoin, L.
- Giroux, J. See Astruc, A.
- Girse, A. C., ultra-violet radiation and cell division, III, 621.
- Gisiger, L., volumetric determination of phosphoric acid on the basis of Lorenz' method, and use of reversed titration, I, 97, 429.
- Gisolf, J. H., absorption spectrum of luminescent zinc sulphide and zinc-cadmium sulphide in connexion with optical, electrical, and chemical properties, I, 124.
- Gispen, R., differences between El Tor and cholera vibrios, III, 1104.
- Gisselsson, L., and Lindgren, G., determination of ether in blood by Widmark's technique, III, 508.
- Gisvold, O., pigments in root-bark of *Celastrus scandens*, II, 484.
- Gittlin, G., gravimetric studies of oviducts of *Xenopus laevis* under normal and experimental conditions, III, 1054.
- Gittleman, L. F. See Pincus, J. B.
- Giuliano, R., condensation product of vanillin and phloroglucinol, II, 266.
- Giulotto, L., origin of the continuum in Raman spectra of electrolytes, I, 120. Change of the solution tension of iron by mechanical force, I, 374.
- Giunchi, G. See Businco, L.
- Giuntini, J., and Reinié, L., ultravirus and fluorescence; action of ultra-violet irradiation on the activity of the vaccinal virus in presence of fluorescent dyes (fluorochromes), III, 947.
- See also Levaditi, C.
- Gius, J. A. See St. John, F. B.
- Giusea, D. See Ghiculescu, T. P.
- Givan, T. B. See Litter, L.
- Givner, I., episcleral ganglion cells, III, 1044.
- Gjert, A., Nordlow, W., and Svenmar, M., case of periarteritis nodosa with specific eye changes, III, 972.
- Gjessing, R., disturbances of somatic functions in catatonia with a periodic course, and their compensation, III, 248.
- Glacet, Z. C., condensation accompanying reduction, II, 334.
- and Wiemann, J., condensation accompanying reduction, II, 334.
- Gladishevskaja, K. A. See Goremikin, V. I.
- Gladstone, G. P., production of staphylococcal α -haemolysin in a chemically-defined medium, III, 205. Interrelationships between amino-acids in the nutrition of *B. anthracis*, III, 793.
- See also Fildes, P., and McIlwain, H.
- Gladstone, M. See Kharasch, M. S.
- Glander, F., structure of the ternary silver-copper-palladium system in the solid state, I, 412.
- Glasebrook, A. L., and Lovell, W. G., isomerisation of cyclohexane and methylcyclopentane, II, 410.
- See also Cramer, P. L.
- Glaser, E., pharmacological action of garlic, III, 612.
- and Haempel, O., Glaser-Haempel fish test, III, 482.
- Glaser, H., and Pfeiffer, P. [with Rühlmann, W.], complex nickel salts with quadri- and sexa-valent central atom, II, 471.
- See also Pfeiffer, P.
- Glaser, R., and Lederer, E., echinochrome and spinochrome; methoxy-derivatives; distribution; associated pigments, II, 439.
- See also Lederer, E.
- Glasoe, G. N., and Steigman, J., fission products from uranium, I, 399.
- See also Anderson, H. L.
- Glasoe, P. K., and Audrieth, L. F., acid catalysis in amines. I. Catalytic effect of cyclohexylammonium salts on the reaction between cyclohexylamine and esters, II, 207.
- Kleinberg, J., and Audrieth, L. F., acid catalysis in amines. II. Catalytic effect of various butylammonium salts on the aminolysis of ethyl phenylacetate in anhydrous *n*-butylamine, I, 311.
- Glass, J., determination of mucin in gastric juice, saliva, and sputum, III, 269.
- Glass, J. J., and Schaller, W. T., inosite, I, 286.
- Glass, N., action of light on bismuth carbonate, I, 35.
- Glass, S. J., and Bergman, H. C., subclinical adreno-genital syndrome, III, 43.
- Glass, V., effect of blood treated by heat, acid, or alkali on growth of *C. diphtheriae*, III, 726.
- and Kennett, S., effect of various forms of particulate carbon on growth of gonococcus and meningococcus, III, 875.
- Glasser, S. M., polycythemia vera, III, 6.
- Glasstone, S., comparative study of development in vivo and in vitro of rat and rabbit molars, III, 542.
- and Hickling, A., mechanism of the Kolbe electrosynthesis and allied reactions, I, 271.
- See also Eyring, H.
- Glathart, J. L., inner, initial, magnetic permeability of iron and nickel at ultra-high radio-frequencies, I, 360.
- Glattfeld, J. W. E., and Kribben, B. D., reduction of *dl*-erythrulose to *dl*-erythrose, II, 405.
- Glatzel, H., salt requirements of man. VI. Salt absorption in the small intestine, III, 63.
- and Wolf, H. J., central disturbance of salt metabolism, III, 372.
- Glauner, B. See Scheil, E.
- Glauser, W. See Goldstein, H.
- Glavan, I., idiopathic cerebral polyneuritis, III, 666.
- Glavind, J. See Dam, H.
- Glavis, F. J. See Marvel, C. S.
- Glazebrook, H. H., and Pearson, T. G., photochemical decomposition of aromatic ketones: the phenyl radical, II, 266.
- Glazko, A. J., and Greenberg, D. M., action of saliva on blood coagulation, III, 450. Is physiological activity of potassium [on heart] due to its natural radio-activity? III, 821.
- Glazunov, A., formation of anode precipitates, I, 378.
- and Kukla, A., influence of electrical resistance of electrolytes on the form of the electrical lines of force, I, 373.
- Gleditsch, E. See Föyn, E.
- Glees, P., anastomoses of nerve cells in the brain of *Scyllium canicula*, III, 28. Functional structure of the caudal vertebral column in *Acanthias vulgaris*, III, 223. Structure of connective tissue in selachian muscle, III, 740.
- Gleiberman, E. J., and Bashenova, M. A., effect of grafting of preserved rabbit skin on experimental skin tuberculosis, III, 334.
- Glemser, O., detection of blood with benzidine in presence of iron oxides and hydroxides, III, 964.
- and Gwinner, E., new ferromagnetic modification of ferric oxide, I, 93, 155.
- Glen, W. L., Sutherland, M. M. J., Wilson, F. J., Browning, C. H., Browning, P., and Robb, J. V. M., preparation and therapeutic properties of certain 4-substituted quinoline derivatives; anti-septic properties and trypanocidal action, II, 227.
- Glenn, F., and Lasher, E. P., destruction of spinal cord and production of hypertension, III, 239.
- See also Person, E. C., jun.
- Glenn, P. M. See Elsom, K. A.
- Glenny, A. T., and Llewellyn-Jones, M., absorption of refined diphtheria antitoxin in guinea-pigs, III, 103.
- and Stevens, M. F., laboratory control of tetanus prophylaxis, III, 104.

- Gleu, K., and Nitzsche, S., methylated and methoxylated 5-chloro-acridines and -acridones and 10-methylacridones, II, 388. Methylated and methoxylated 10-methylthioacridones and 10-methylacridoneanils, II, 389. Methylated and methoxylated 10:10'-dimethyldiacridones and 10:10'-dimethyldiacridylum salts, II, 391.
- Nitzsche, S., and Schubert, A., action of phosphoryl chloride and oxalyl chloride on acridones, II, 343.
- and Schaarschmidt, R., 10-substituted thio- and seleno-acridones, II, 389. 10-Substituted acridoneanils and acridoneazines, II, 449.
- Gley, P., study of coronary circulation, III, 745.
- See also Berthier, G.
- Glezina, O. M., changes in the redox potential of bird muscles at various ages, III, 242. Effect of age on oxidation-reduction processes in avian muscles, III, 770.
- Glick, D., Linderstrom-Lang-Holter technique in histological chemistry and development of ultramicro-techniques, III, 639. Effect of temperature on activity of choline-esterase, III, 871. Specificity of choline-esterase, III, 1096.
- and Antopol, W., inhibition of choline-esterase by thiamin, III, 702.
- Lewin, A., and Antopol, W., occurrence of choline-esterase in swine, III, 870.
- Glickson, E. B., mechanism of the action of radiant energy on the organism. I. Ultra-violet radiation, III, 1006.
- Glikman, S. A., hydrosols of pectin and organosols of cellulose esters, I, 76. Threshold of the structure viscosity of cellulose ester solutions, I, 77. Osmotic pressure and size of aggregates in cellulose ester solutions, I, 258.
- Glingar, A., chemotherapy of male gonorrhoea with uleron and albucid, III, 503.
- Gliszczynski, S. von. See Stoicovici, E.
- Glixelli, S., and Jaroszówna, S., hydration of metaphosphoric acid in aqueous solutions, I, 273.
- Glock, G. E., Murray, M. M., and Pincus, P., origin and significance of salivary phosphatase, III, 199.
- See also Thewlis, J.
- Glocker, R., effect of an elastic anisotropy on the X-ray determination of strains, I, 131.
- Glockler, G., and Bachmann, J. H., Raman effect of dibromofluoromethane, I, 58, 300. Raman effect of fluorochloromethane, I, 450.
- and Horwitz, W., sulphur bands and an attempt to obtain HS bands, I, 548. Rapid measurement of glass capillary diameters, I, 583.
- and Leader, G. R., Raman effect of fluorotrichloromethane, I, 301. Raman effect of difluoromethane, I, 355. Raman effect of difluorodibromomethane and chlorodibromomethane, I, 450.
- See also Taylor, T. I.
- Glosios, T., nuclear formation under the influence of electrical charges, I, 237.
- Glitz, G. See Polonovski, M.
- Glover, R. E., cultivation of virus of Aujeszky's disease on the chorio-allantoic membrane of developing egg, III, 796.
- Gloyer, S. W., and Schuette, H. A., sterols of rye-germ oil, III, 950.
- Gluchova, A. I. See Miris, D. I.
- Glücksman, A., studies of bone mechanics *in vitro*. I. Influence of pressure on orientation of structure. II. Role of tension and pressure in chondrogenesis, III, 542.
- Gluschnev, N. F. See Kazanski, B. A.
- Go, Y., Nakamura, Seiji, and Nagata, S., X-ray investigation of mould mycelia, III, 327.
- Goche, O., and Wilman, H., structure of silver films, I, 459.
- Gocholashvili, M. M. See Maximov, N. A.
- Gochshtein, J. P., determination of small amounts of lead in presence of copper, iron, and tin, I, 535.
- and Pokrovski, V. A., influence of CN⁻ concentration on the deposition potential of Ni²⁺ at a dropping mercury electrode, and on the height of the diffusion wave of the latter, I, 324.
- Godber, G. E. See Cruickshank, R.
- Godbert, A. L., and Belcher, R., preservation of sodium rhodizonate indicator paper, I, 390.
- Godchot, M., and Cauquil, (Mlle.) G., Raman effect of cyclanones, I, 301.
- Cauquil, (Mlle.) G., and Calas, R., *cis*- and *trans*-I, and -II-3-methylcyclopentanol. I-IV, II, 476.
- and Viéles, P., mixed ethyl *l*-menthyl dilactylates [oxidodi-*aa*'-propionic acid derivatives]; attempt to prepare an optically active diester, II, 79.
- Goddard, D. R., and Smith, Paul E., respiratory block in dormant spores of *Neurospora tetrasperma*, III, 213.
- See also Allen, P. J.
- Goddard, E. N. See Lovering, T. S.
- Godden, W. See Duckworth, J., Fraser, A. H. H., Snook, L. C., and Subrahmanyan, V.
- Godfrey, T. B., gold-chromium resistance wire, I, 389.
- Godfrey, T. M. See Irwin, M. H.
- Godfried, E. G., polypeptide content of serum, III, 816.
- Godina, G., structure of the mammalian pineal gland, III, 39.
- Godlewski, H., observations of microincineration, using a new arrangement permitting direct control, III, 226.
- Godshello, M. G., Mlinik, I. R., and Tabakov, N. D., laboratory study of explosivity of gas mixtures, I, 45.
- Godwin, M. C., mammalian thymus IV; development in the dog, III, 642.
- Goebel, A. See Klenk, E.
- Gobel, E. F., determination of boron, etc., in boron minerals, I, 496.
- Goebel, W. F., immunity to experimental pneumococcus infection with an artificial antigen, III, 429. Antibacterial immunity induced by artificial antigens, III, 630.
- Beeson, P. B., and Hoagland, C. L., chemo-immunological studies on the soluble specific substance of *Pneumococcus*. IV. Capsular polysaccharide of type XIV *Pneumococcus* and its relationship to the blood group A specific substance, III, 944.
- See also Hoagland, C. L.
- Goedkoop, M. L. See Wahl, A.
- Goedrich, P., increase of bactericidal action of germicides by variation in pH, III, 433.
- Goehring, M. See Stamm, H.
- Gomori, P. See Margitay-Becht, A.
- Görg, P., experiences with gastro-sil, III, 411.
- Görl, P., peroral administration of salyrgan, III, 715.
- Görlich, P., spectral sensitivity distribution in selenium barrier-layer cells, I, 356.
- Goerner, A., and Goerner, M. M., vitamin-A and liver cell tumours, III, 697.
- Goerner, M. M. See Goerner, A.
- Göthals, T. R., medical aspects of obstetrics, III, 583.
- Göthlin, G. F., action of vitamins on oxygen uptake, III, 73. Cable hypothesis and conception that the conduction velocity for action potentials is greater in coarser than in finer nerve fibres, III, 568.
- Goettsch, M., Lonstein, I., and Hutchinson, J., muscle-phosphorus in nutritional muscular dystrophy in rabbits, III, 567.
- and Ritzman, J., preventive effect of wheat-germ oils and of α -tocopherol in nutritional muscular dystrophy of young rats, III, 1075.
- Goetz, A., possible use of superconductivity for radiometric purposes, I, 490.
- Goetz, R. H., early development of the Tenrecoida (*Hemicentetes semispinosus*), III, 224.
- Götze, J., optically active cyanine dyes, II, 39.
- Goetze, O. See Rehn, E.
- Götzl, F. See Halla, F.
- Goffart, M., acetylcholine content of intact and denervated alimentary canal in the dog, III, 592. Effect of adrenoxone on isolated intestine, III, 978.
- and Bacq, Z. M., acetylcholine content of eserinated venous blood from different segments of alimentary canal, III, 962. Acetylcholine content of alimentary canal after vagotomy and local denervation, III, 969.
- See also Szent-Györgyi, A.
- Goffin, R., effect of hyperglycemia on biliary secretion, III, 987.
- Gogate, D. V. See Williams, W. E.
- Goggans, J. F., jun., and Copenhaver, J. E., alkyl hydrogen phthalates from normal aliphatic alcohols, II, 548.
- Goggio, A. F. See Downman, C. B. B.
- Goglia, G., action of testosterone propionate, III, 267.
- Goia, J., Gavrila, J., and Opreanu, J., glycosuria following insulin shock, III, 976.
- Goidsenhoven, C. van, and Schoenaers, F., biochemical properties of *Salmonella pullorum*, III, 876.
- Gokhale, S. K., non-protein-nitrogen of blood in normal Indian men, III, 452.
- Golandas, G. See Staub, H.
- Golberg, L. See Dodds, E. C.
- Gold, H., active immunisation of allergic individuals against tetanus by means of tetanus toxoid, alum-precipitated refined, III, 93.
- Civin, H., and Salzman, C., gluconic acid as urinary acidifying agent in man, III, 915.
- Kwit, N. T., Otto, H., and Fox, T., vagal and extravagal factors in cardiac slowing by digitalis in auricular fibrillation, III, 861.
- Goldberg, H. E. See Digilio, V. A.
- Goldberg, I., thyroid, pituitary, and serum-proteins, III, 451.

- Goldberg, L., temperature of the solar chromosphere, I, 501. Equivalent widths of helium lines in early-type stars, I, 501.
- and Clogston, A. M., variational atomic wave functions, I, 594.
- Goldberg, M. W., and Aeschbacher, R., steroids and sex hormones. LVI. Transformation of Δ^6 -17-acetylenyl-androstene-3:17-diol into progesterone. LVII. Addition of aniline to Δ^6 -17-acetylenyl-androstene-3:17-diol, II, 552, 553.
- and Müller, P., steroids and sex hormones. XLVI. Syntheses with β -diacetylene, II, 7.
- See also Ruzicka, L.
- Goldberg, S. L. See Hiatt, N.
- Goldberger, E. W. See Vollmer, H.
- Goldblatt, H., experimental observations on surgical treatment of hypertension, III, 658.
- Goldbloom, A., and Lieberman, A., clinical studies in circulatory adjustments, III, 557.
- and Segall, H. N., auricular fibrillation in infancy, III, 1031.
- Goldby, F., investigation of motor cortex and pyramidal tract of *Echidna aculeata*, III, 1037.
- Goelck, H., action of mandelic acid on urinary *B. coli* infections, III, 775.
- Golden, J. B., and Sevringhaus, E. L., inactivation of oestrogenic hormone of the ovary by the liver, III, 263.
- See also Lauson, H.
- Goldenberg, I. J. See Tzechnovitzer, M. M.
- Goldet, A., measurement of refractive indices in the ultra-violet, I, 103.
- Goldfarb, J. L., and Smorgonski, L. M., reactions of etherates of stannic chloride and titanium tetrachloride. III. Reaction of dioxanates and tetrahydrofuranates of stannic chloride and titanium tetrachloride with acid chlorides, II, 263.
- Synthesis of ketones of the furan series, II, 274.
- Goldfarb, W., Bowman, K. M., Parker, S., and Krautman, B., treatment of acute alcoholism with glucose and insulin, III, 997.
- Goldfeder, A., action of X-irradiation and radium on normal and neoplastic tissue, III, 718. Respiratory changes *in vitro* in normal and malignant tissues following [X]-irradiation, III, 1063.
- Goldhaber, M., Hill, R. D., and Szilard, L., radioactivity induced by nuclear excitation. I. Excitation by neutrons, I, 173.
- See also Collins, G. B.
- Goldhamer, S. M. See Sturgis, C. C.
- Goldich, S. S., and Kinser, J. H., perthite from Tory Hill, Ontario, I, 587.
- and Müllenburg, G. A., labradorite-hyperorante, I, 288.
- Goldie, H., "haemolytic" action of silicic acid, III, 451. Effect of oleic acid on activity of haemolytic system, III, 894.
- and Sandor, G., inactivation of tetanus toxin by keten, III, 104. Effect of keten on anti-sheep haemolysin or horse serum, III, 105. Attenuation of anaphylactogenic properties of anti-tetanus serum by keten, III, 935.
- See also Sandor, G.
- Goldie, W. See Hartfall, S. J.
- Goldin, M. I., tobacco mosaic virus as influenced by micro-organisms, III, 729.
- Goldman, D., chart for control and recording of insulin shock therapy, III, 131.
- Use of mapharsen in treatment of malaria, III, 414.
- Goldman, F. See McGuire, J.
- Goldman, F. H., and Dalla Valle, J. M., accurate determination of the components of a heterogeneous particulate mineral system, I, 287.
- Goldman, L., cream modification of benzyl benzoate treatment for scabies, III, 1085.
- See also Blackfield, H. M., and Tauber, E. B.
- Goldman, S. See Rozenfeld, L. E.
- Goldmann, F., and Ekstein, G., renal dwarfism due to tubular dysfunction; clinical and metabolic studies of a case, III, 987.
- Goldner, J., changes in musculature of the appendix in chronic appendicitis, III, 484.
- Goldner, K. J., and Rogers, C. H., preparation of mannonolactones from seeds of date palm (*Phoenix dactylifera*); effect on gastric mucin smears, II, 405.
- Goldowski, (Mle.) N., solution potential; aluminium in presence of different gases, I, 324.
- Goldring, W. See Smith, H. W.
- Goldschmidt, B., fractionation of radium in precipitation of barium iodate from various solutions of radium-containing barium salts, I, 210.
- and Djourkovitch, O., chemical analysis by artificial radioactivity; determination of dysprosium in a fractionation of yttria earths, I, 338.
- Goldschmidt, H. J. See Bradley, A. J.
- Goldschmidt, R., magnetic stability, I, 313.
- Goldschmidt, Samuel, Vars, H. M., and Ravdin, I. S., influence of food-stuffs on susceptibility of liver to injury by chloroform, III, 691.
- See also Ravdin, I. S.
- Goldschmidt, V. A., and Vorobiev, N. K., kinetics of bimolecular reactions in solution, I, 570. Effect of complex formation in solutions on chemical kinetics, I, 606.
- Goldshine, A. D. See Ayman, D.
- Goldsmith, G. A., and Ellinger, G. F., saturation test for vitamin-C, III, 605.
- Goldsmith, H. H. See Cohen, V. W., and Manley, J. H.
- Goldstein, A. E., preparation and m.p. of 1-iodoanthraquinone, II, 379.
- Goldstein, B., biochemistry of tissue-proteinases, III, 198, 736.
- and Bondareva, S. P., connexion between ascorbic acid and liver-lipase, III, 75.
- and Eljaschkevitch, E. S., liver-lipase and -fat in growing organisms, III, 149.
- Ginzburg, M., and Milgram, E., specificity of tissue proteinases (cathepsins), III, 99.
- Ginzburg, M., and Scheves, G., cathepsin and glutathione in the liver of normal rabbits, and in hyperthyreosis, III, 100.
- Kolomietz, M. L., and Knischenko, P. G., determination of glutathione in tissues, III, 886.
- Goldstein, D., Block, M., and Rosenbluth, M., effect of artificial pneumothorax on anoxaemia of pneumonia, III, 25.
- Goldstein, F. See Maxwell, R. D.
- Goldstein, H., and Fischer, H. A., 7-halo-*geno*-1-naphthoic acids, II, 65.
- and Glauser, W., transformation products of 2-chloro-4:5-dinitrobenzoic acid, II, 64.
- See also McFarland, R. C.
- Goldstein, K., the tonic foot response to stimulation of the sole, III, 32.
- Landis, C., Hunt, W. A., and Clarke, F. M., Moro reflex and startle pattern, III, 246.
- Goldstein, L., statistical interpretation of the recombination of atomic nuclei, I, 56. Statistical mechanism of nuclear collisions, I, 176.
- Rogozinski, A., and Walen, R. J., scattering by uranium nuclei of fast neutrons and the possible neutron emission resulting from fission, I, 545.
- Goldstein, M. A., thyroxine therapy in otosclerosis; report of forty-two cases, III, 255.
- Goldstein, M. S., development of the bridge of the nose, III, 807.
- Goldstein, R., non-specific treatment of allergic conditions with pyrifer, III, 716.
- Goldsworthy, N. E. See Wilson, Harold.
- Goldsztaub, B., arrangement of atoms in laurionite, PbOHCl, I, 435.
- Goldwasser, S., and Taylor, H. S., isomerisation of alkenes on alumina and thoria, I, 478. Aromatisation of heptane, heptene, and hexene isomerides on chromic oxide, I, 479. Dehydrogenation of cyclooctene, II, 305. Catalytic dehydration of C_8-C_9 aliphatic alcohols, II, 401.
- Golick, A. M. See Foter, M. J.
- Goll, G., and Bakos, T., X-ray study of the crystal structure of silver sulphide, I, 466.
- Goll, H., action of cod-liver oil on milk teeth caries, III, 284.
- Gollnow, H. See Schüller, H.
- Gollwitzer-Meier, K., energetics of the mammalian heart, III, 557.
- and Kroetz, C., sympatheticotropic circulatory therapy, III, 861.
- Kroetz, C., and Krüger, Erich, oxygen consumption and coronary flow of the innervated heart in relation to different types and degrees of work, III, 656.
- Golman, S. V., pain and muscular fatigue, III, 569.
- Golombik, M. S., Levina, M. M., and Petin, N. N., passivity of iron. I. Kinetics of solution of iron in nitric acid, I, 528.
- Golovina, V. P. See Majorov, F. P.
- Golovko, L. V. See Sabinina, L. E.
- Golovitschinskaja, E. S. See Magidson, O. J.
- Goltzman, N. See Kurnakov, N. S.
- Golub, G. B. See Levina, P. J.
- Golumbic, C., and Cottle, D. L., reaction of styrene oxide with magnesium methyl iodide, II, 315.
- Gombás, P., calculation of the position and width of the energy band of the valency electrons in alkali metals, I, 118. Calculation of eigen-function and energy of ground state of valency electron in alkali atoms, I, 352. Position and width of the energy band of the valency electrons of sodium, potassium, rubidium, and caesium, I, 507.
- Gomberg, L. L. See Terentiev, A. P.
- Gomez, E. T., and Turner, C. W., effect of anol and dihydrotheelin on mammo-genic activity of pituitary gland of rabbits, III, 48.
- See also Lewis, A. A.

- Gompel, M., metabolism of marine animals uncovered at low water compared with fresh-water crayfish in air, III, 278.
- Gon, K. See Boku, S.
- Gonggrijp, J. H. See Boeseken, J.
- Gonin, A. See Froment, R.
- Gonley, B. A., and Soloff, L., use of quinine in digitalis intoxication, III, 183.
- Gonnard, P., hordenine reineckate, II, 352.
- Gonne, W. S. See Michels, M. W.
- Gonyer, F. A. See Berman, H., and Richmond, W. E.
- González, L. M. See Morales-Otero, P.
- González, R., influence of the hypophysis in renal compensatory hypertrophy, III, 66. Renal compensatory hypertrophy in batrachians, III, 66.
- Gonzalo, J. See Kleist, K.
- Good, W. E., and Hill, R. D., investigation of boron by slow neutrons, I, 504.
- Goodall, J. R., and Power, R. M. H., visceral allergy, III, 512.
- Goodell, M. See Sahyun, M.
- Goodenough, B. H. See Schettler, O. H.
- Goodeve, C. F., thixotropy and viscosity, I, 142. Instrument for measurement of anomalous viscosity, I, 160.
- and Katz, S., absorption spectrum of nitrosyl chloride, I, 550.
- and Marsh, A. E. L., heat of decomposition of chlorine trioxide and the energy of the oxygen-chlorine bond, I, 566.
- See also Schneider, E. E.
- Goodfriend, J., Chain, E., and Florey, H. W., reticulocytogenic agent for guinea-pigs in gastro-intestinal secretions, III, 350.
- Goodhand, C. L. See Novey, M. A.
- Goodhart, R. S., and Sinclair, H. M., cocarboxylase (vitamin-B₁ diphosphate) in blood, III, 720, 893.
- Goodhue, L. D., and Haller, H. L., crystalline solvates of inactive deguelin, II, 176.
- Goodier, T. E. W., sulphanilamide and the metabolism of fat and carbohydrate, III, 407.
- Goodman, C., and Herman, A. L., simple counting aid, I, 390.
- See also Evans, R. D., and Young, R. C.
- Goodman, J., use of the scratch test in dermatology, III, 512.
- and Sulzberger, M. B., allergy in dermatology, III, 1091.
- Goodman, L. See Gilman, A.
- Goodman, M. H., chronic streptococcal ulcer of the skin [treated with sulhanilamide], III, 303. Cutaneous hypersensitivity to the procaine anaesthetics; correlation of hypersensitivity with chemical structure, III, 864. Relation between pigmentation and growth of hair [alopecia treated with anthralin], III, 1084.
- Goodpasture, E. W., Auerbach, S. H., Swanson, H. S., and Cotter, E. F., virus pneumonia of infants secondary to epidemic infections, III, 1105.
- Douglas, B., and Anderson, K., human skin grafted on the chorio-allantois of chick embryos, III, 543.
- Goodpasture, W. C., Vermeulen, C., Donovan, P. B., and Dragstedt, L. R., bromsulphalein liver function test as a method of assay of lipocae, III, 389.
- Gbdrich, C. H., health department in the field of medicine, III, 619.
- Goodrich, E. See Smith, F. J.
- Goodson, L. H., and Noller, C. R., saponins and sapogenins. XI. Neotigogenin, a steroid sapogenin, II, 517.
- See also Noller, C. R.
- Goodspeed, G. E., geology of the gold quartz veins of Cornucopia, I, 343.
- Goodward, G. E. See Schroeder, E. F.
- Goodway, N. F., and West, T. F., addition reactions to conjugated systems; β -phellandrene and maleic anhydride, II, 79.
- Goodwin, E. T., electronic states at the surfaces of crystals. I. Approximation of nearly free electrons. II. Approximation of tight binding: finite linear chain of atoms. III. Approximation of tight binding: further extensions. IV. Activation of adsorbed atoms by surface electrons, I, 513, 554.
- Goodwin, J. E., Lloyd, D. P. C., and Hall, G. E., experimental insulin and metrazol shock. IV. Action of metrazol and insulin on brain potentials of the rabbit, III, 249.
- Goor, J. M. N. van, multiple myeloma and leukaemia, III, 349.
- Goormaghtigh, N., and Handovsky, H., effect of vitamin-D₂ (calciferol) on the dog, III, 403.
- Goos, F., electrical investigation of zinc sulphide-copper phosphors, I, 58. Selenium photo-cells. III. Behaviour in a high-frequency circuit, I, 544.
- Goossens, N., and Liebieh, H. A., coagulation time of recalcified oxalate plasma from normal and pathological cases under anaesthesia, III, 550.
- See also Dyckerhoff, H.
- Gopal, R. See Nayar, M. R.
- Gora, E., theory of the Compton effect, I, 51.
- Goranson, R. W., silicate-water systems: phase equilibria in the NaAlSi₃O₈-H₂O and KAlSi₃O₈-H₂O systems at high temperatures and pressures, I, 201.
- and Zisman, W. A., electrical properties of multilayers, I, 468.
- Gorbatscheva, I. N., and Levkoev, I. I., structure and properties of pinacryptogreen, II, 88.
- Gorbatschevskaja, V. G., effect of hydrocyanic acid and cysteine on disintegrating power of extracts of germinated wheat, III, 800.
- Gorbovski, A. G. See Cholođni, N. G.
- Gorbunova, K. M., deposition of metals on monocrystals, I, 208. Interaction of electro-deposited metals with the cathode, I, 267.
- Gordon, A., encephalitis lethargica of vegetative centres, III, 667.
- Gordon, A. H. See Gorran, H. S.
- Gordon, A. R., extrapolation of conductance data for the univalent nitrates and iodates by means of the extended Onsager-Shedlovsky equation, I, 324.
- See also James, W. A., Le Roy, D. J., and Shankman, S.
- Gordon, A. S., bone marrow, III, 348.
- See also Rawls, W. B.
- Gordon, H., methylene-blue stain for sections of formalin-fixed marrow, III, 348.
- Gordon, H. H., Levine, S. Z., Marples, E., McNamara, H., and Benjamin, H. R., water exchange of premature infants; comparison of metabolic (organic) and electrolyte (inorganic) methods of measurement, III, 501.
- See also Levine, S. Z.
- Gordon, H. McL., chemotherapy of cesophagostomiasis of sheep with special reference to efficiency of phenothiazine, III, 1084.
- and Whitten, L. K., anthelmintic efficiency of phenothiazine against *Haemonchus contortus* in sheep, III, 1085.
- Gordon, J., and Atkin, W. R., artificial opsonisation of bacteria. III., III, 206. Artificial opsonins: globin as an opsonin, III, 552.
- Gordon, J. J., and Quastel, J. H., determination of lactic acid in biological material by oxidation with ceric sulphate, III, 953.
- and Watson, H. B., *ortho*-effect. V. Alkaline hydrolysis of ethyl anthranilate, I, 527.
- Gordon, M., and Smith, G. M., progressive growth stages of a heritable melanotic neoplastic disease in fishes from the day of birth, III, 57. Production of a melanotic neoplastic disease in fishes by selective matings. IV. Genetics of geographical species hybrids, III, 490.
- Gordon, N. T., Seitz, F., and Quinlan, F., blackening of zinc [and cadmium] sulphide phosphors, I, 124.
- Gordon, V. M. See Schvemberger, V. I.
- Gordon, W. See Coates, G. M.
- Gordon, W. G., metabolism of *N*-methylated amino-acids. I. Availability of α -*N*-monomethyl-lysine and α -*N*-dimethyl-lysine for growth. II. Comparative availability of *l*(-)-tryptophan, *l*(+)- and *dl*-amino-*N*-monomethyltryptophan for growth, III, 397, 854.
- Gordonoff, T., and Scheurer, H., phrenicotomy and expectoration, III, 1033.
- and Walthard, B., experimental epithelioma in man, III, 696.
- See also Alder, P.
- Gordy, W., association of unlike molecules through hydrogen bonds, I, 59. Spectroscopic comparison of the proton-attracting properties of liquids, I, 178. Spectroscopic evidence of hydrogen bonds; chloroform and bromoform in donor solvents; aniline and some substituted phenols, I, 240.
- and Martin, P. C., infra-red absorption of hydrogen chloride in solution, I, 179.
- Gore, H. K. See Ahmad, B.
- Goreczky, L., effects of vegetative poisons on bactericidal power of serum, III, 433.
- and Ludány, G. von, complement content of splenic "depot" serum, III, 11. Action of calcium on basal metabolic rate in man, III, 188. Bactericidal power of spleen-depot serum, III, 434.
- Goremikin, V. I., and Gladishevskaja, K. A., mixed platinum hydroxylamine tetramines, I, 533.
- Gorenbein, E. J., kinetics of complex formation in non-aqueous solutions in connexion with electrical conductivity. II, I, 261.
- Gorev, M. M., pathogenesis of circulatory disturbances in shock (anaphylactic and hetero-transfusional), III, 364.
- Gorham, L. W., and Martin, S. J., coronary occlusion without pain, III, 237.
- See also Martin, S. J.

- Gorin, E., primary process in the photo-decomposition of aldehydes and ketones, I, 35. Photolysis of acetaldehyde in presence of iodine, I, 209. Photolysis of aldehydes and ketones in presence of iodine vapour, I, 330.
- Kauzmann, W., and Walter, J., optical activity of the sugars, I, 357.
- Kauzmann, W., Walter, J., and Eyring, H., reactions involving hydrogen and hydrocarbons, I, 568.
- Walter, J., and Eyring, H., optical activity of secondary butyl alcohol, I, 61. Internal rotation and resonance in hydrocarbons, I, 454.
- Gorin, M. H., equilibrium theory of ionic conductance, I, 474.
- See also Abramson, H. A.
- Goris, A., and Canal, H., possible formation of ethyl esters during fixation of plant tissues, III, 950.
- Gormly, C. F. See Cutts, M.
- Gornall, A. G., and Hunter, A., *l*-(+)citraline, II, 144.
- Gorodetskaja, A., and Proskurnin, M., capacity of the solid mercury electrode, I, 202.
- See also Frumkin, . and Xenofontov, A.
- Gorodetzky, S., generalisation of coincidence devices; anticoincidences and their application to the study of cosmic rays, I, 492.
- Gorodinskaja, R. S., nerve-cells in trunk of rabbit vagus nerve, III, 667.
- Gordner, A. See Castex, M. R.
- Gorter, C. J., paramagnetic dispersion and absorption, I, 131. Problems of dia- and para-magnetism, I, 513.
- Teunissen, P., and Dijkstra, L. J., apparent absence of paramagnetic dispersion and absorption in titanium caesium alum, I, 66.
- See also Brons, F., and Teunissen, P.
- Gorter, E., protein molecule, III, 785.
- Gortner, R. A. See Lauffer, M. A.
- Gortner, R. A., jun., and Lewis, H. B., determination of selenium in tissues and faeces, III, 640.
- Gortner, W. A., analyses of glacial and preglacial woods, III, 109.
- Goshorn, R. H., and Degering, E. F., preparation and bactericidal and physical properties of α -phenylalkanoic acids, III, 84.
- Goss, C. M., first contractions of the heart in rat embryos, III, 18. Protoplasmic movement in cardiac muscle during interval between contractions, III, 820.
- Goss, H. See Gregory, P. W., and McElroy, L. W.
- Gosse, F., electrocardiograms in cardiac infarct, III, 237.
- Gosseries, A., determination of ionisation coefficients α and γ in gases, I, 352.
- Gosses, J., glomus caroticum, III, 2.
- Gosset, A., Tchakirian, A., and Magrou, J., composition of bacterial galls on *Pelargonium zonale* and of tissues from which they develop, III, 536.
- Gossner, B., potassium magnesium ferric sulphate resembling voltaite; β -metavoltin, I, 392.
- Góth, A., determination of saturation by vitamin-C, III, 705.
- Gothié, S., and Moricard, R., testicular regression following hypophysectomy in rat, III, 978.
- and Tsatsaris, B., nuclear development during first maturation division of oocyte of mouse grown *in vitro*, III, 980.
- See also Morieard, R.
- Gotman, J. D., anomalies in the properties of cassiterite, I, 588.
- See also Borovik, S. A.
- Goto, K., and Shishido, H., constitution of tuduranine, II, 189. Sinomenine. XLVI. Constitution of tuduranine, II, 459.
- See also Titani, T.
- Gotsev, T., blood volume in lambs, III, 230.
- Gott, O., and Krings, W., systematic magnetic measurements on iron compounds, especially the course of the magnetic properties in transition from bivalent to trivalent iron, I, 16.
- Gottberg, K. von. See Schöpf, C.
- Gottfried, S. P. See Natelson, S.
- Gottlieb, P., clinical experiences with depot insulins, III, 682.
- Gottlieb, N. See Hoag, J. B.
- Gottschall, R. Y. See Evans, M. E.
- Gottschewski, G., and Fischer, I., pigment-forming property of the eye of *Drosophila in vitro*, III, 971.
- See also Fischer, I.
- Gottwick, R. See Alten, F.
- Goubau, M. R., spectrophotometric measurements of micro-amounts of alcohol in the blood, III, 818.
- Goubergritz, M. M., blood changes in pain, III, 568.
- Goudsmit, A., jun., Power, M. H., and Bollman, J. L., excretion of sulphates by the dog, III, 761.
- Goudsmit, J., and Westenbrink, H. G. K., relation of uptake and excretion of aneurin in normal subjects and pregnant women, III, 165.
- Goudsmit, S., and Saunderson, J. L., multiple scattering of charged particles, I, 507.
- See also Proca, A.
- Goufas, G., treatment of retrotonsillar abscess [with "omnadin"], III, 611.
- Gougerot, L. See Byrne, J.
- Gough, A., disgerminoma of the ovary, III, 381.
- Gouguel, B., and Ruderman, E., mechanism of adsorption. I. New theory of adsorption, I, 71.
- Gould, R. G., jun., and Jacobs, W. A., preparation of trimethyleneindole derivatives, II, 520.
- See also Jacobs, W. A.
- Goupil, J. J. See Dubrisay, R.
- Gourévitch, A., diffusibility of substances with a blue fluorescence, III, 515.
- Vitamin-B₂ effect of extracts of baker's yeast, III, 851.
- See also Dheré, C., Rabaté, J., and Random, L.
- Goutner. See Layani, F.
- Gouza, J. J. See Fuson, R. C.
- Gouzon, B. See Bierry, H.
- Govaert, F., and Bysaert, M., pentaerythritol monobromo- and monoiodohydrins, II, 199. Amino-derivatives of pentaerythritol. II. Tetra(aminomethyl)methane. III. Di(hydroxymethyl)di(aminomethyl)methane, II, 534.
- Govaerts, J., concentration of radio-phosphorus ^{32}P by an electric field, I, 397.
- Govaerts, P., and Muller, P., mechanism of glucose excretion by the kidney in diabetic dogs, III, 392.
- Govindachari, T. R. See Dey, B. B.
- Govindarajan, S. R. See Rao, S. R.
- Govindaswamy, M. V., cardiazol treatment of schizophrenia, III, 572.
- Govorov, A. I. See Gavrilov, N. I.
- Gowen, J. W. See Koch, F. L. P.
- Gower, W. C., modified stain for trematodes, III, 645.
- Gowing, J., and Macklin, M. T., cervical polyps in both of presumably identical twins, III, 1022.
- Goyle, A. N., haemolysis by vibrios, III, 946.
- Gozzano, M., and Vercellana, G., electroencephalographic records during experimental beriberi, III, 469.
- Grab, W., experiments with dihydroxydiethylstilbene, III, 589.
- and Moll, T., difference in action of vitamin-A concentrates from fish-liver oils, III, 765.
- Grabar, P., action of pepsin on anti-pneumococcal anti-bodies, III, 204.
- and De Loureiro, J. A., preparation of membranes for ultrafiltration, I, 539.
- and Hornus, G., precipitation of the sugar-lipin antigen-O of *B. typhosus* by rabbit's immune serum, III, 945.
- See also Heidelberg, M., and Schneier-son, S. S.
- Grabbe, E. M. See McKeehan, L. W.
- Graber, L. F. See Sprague, V. G.
- Graber-Duvernay, J., and Gerbay, F., cerebrospinal fluid in polyarthritis chronica, III, 833.
- Grabfield, G. P., and Swanson, D., denervated kidney, III, 390. Denervated kidney. V. Effects of unilateral denervation on uricosuric effect of cinchophen, III, 713.
- Grace, A. W., and Suskind, F. H., aetiology of pemphigus vulgaris; isolation of transmissible agent from a fourth case of the disease, III, 632.
- Grace, N. H. See McRostie, G. P.
- Grădinesco, A., and Degan, C., partial replacement of endogenous nitrogen loss by amino-nitrogen, III, 295.
- and Pora, E. A., action of direct current on the branchial permeability of *Cyprinus carpio*, III, 278.
- Graef, C. See Vallarta, M. S.
- Graef, E. See Dilthey, W.
- Gräf, J., migration of basophil cells into the posterior pituitary in cases of hypertension, III, 137.
- Graeser, J. B., inhalation therapy of bronchial asthma, III, 747.
- Graf, G. See De Toni, G.
- Graf, H. See Schenck, G.
- Graf, J. See Graf, L., and Langendorff, H.
- Graf, J. C. B. See Martini, A.
- Graf, L., and Graf, J., analysis of ray-quality during deep X-ray therapy using tensions of 200 and 400 kv., III, 318.
- See also Langendorff, H.
- Grafe, D., Clusius, K., and Kruis, A., measurement and statistical calculation of the equilibrium $\text{D}_2 + \text{H}_2\text{S} \rightleftharpoons \text{H}_2 + \text{D}_2\text{S}$, I, 370.
- Grafe, E., advances in insulin therapy of diabetes mellitus, III, 582.
- Graff, (Mlle.) M. See Foëx, G.
- Graff, S., glutamic acid in malignant tumours, III, 1064.
- Graff, U., action of baths and fever on porphyrin excretion, III, 171.
- See also Jenke, M.
- Graffin, A. L., absorption of fluorescein from fresh water and salt water by *Fundulus heteroclitus*, as judged by a study of the kidney with the fluorescence microscope, III, 156.

- Grafflin, A. L., normal, acromegalic, and hyperplastic nephritic human nephron; [reconsideration of plastic reconstructions of Turley], III, 595.
- and Foote, J. J., Bodian technique as applied to the complicated cell boundaries of the renal epithelium in mammals, III, 444.
- See also Foote, J. J.
- Gragerova, R. B., senility in Abchasian centenarians. V. Blood morphology, III, 393. Phagocytic activity of leucocytes, III, 447.
- Graham, D., Warner, W. P., Dauphinee, J. A., and Dickson, R. C., treatment of pneumococcal pneumonia with daganan (M. & B. 693), III, 857.
- Graham, E. A. See Bricker, E. M.
- Graham, E. R., magnesium as a factor in nitrogen fixation by soya beans, III, 532.
- Graham, H. T. See De N6, R. L.
- Graham, J. I., Skinner, D. G., and Walton, W. H., production of dust in hard headings and means for its suppression, III, 782.
- See also Haldane, J. S., and Shaw, A.
- Graham, M., and Harding, J. P., hydrology and plankton of the North Sea and English Channel, I, 106.
- Graham, R. See Levine, N. D.
- Graham, W. A., and Pettit, M. D., clinical study of acid alurate as a rectal analgesic during labour, III, 87.
- Graham, W. R., jun. See Houchin, O. B.
- Grahame, D. C., search for long- or short-lived radio-chlorine, I, 54. Modified burette for micro-analysis of gases, I, 493.
- See also Rollefson, G. K.
- Grainger, J., time of flowering of plants. I. Relation of nocturnal translocation to time of flowering, III, 532.
- Gralen, N., mol. wt. of crystalline myogen, III, 938.
- and Svedberg, T., "intraglobular" reactions and the cyclol structure of proteins, I, 320.
- Gramling, L. G. See Christensen, B. V.
- Grammaticakis, P., action of mixed organo-magnesium compounds on benzylimines; preparation of secondary amines of the type $\text{CHRR} \cdot \text{NH} \cdot \text{CH} \cdot \text{Ph}$, II, 56. Secondary reactions in the condensation of organo-magnesium compounds with phenylhydrazones, II, 163. Action of mixed organo-magnesium compounds on benzaldehydeacylphenylhydrazones; preparation of α -acyl- β -alkylphenylhydrazines, II, 415. Action of mixed organo-magnesium compounds on osazones, II, 428. Action of mixed organo-magnesium compounds on the phenylhydrazones of cyclanones, II, 487.
- Granatowicz, J., action of X-rays on lymph formation in dogs, III, 660.
- Grand, C. G., neoplasm. VI. Granulocytic accumulation following *in vivo* Roentgen irradiation of mouse sarcoma 180, III, 1064.
- See also Chambers, R.
- Grandadam, P. See Lafitte, P.
- Grandchamp, L. E., and Vollaie-Salva, J., rapid determination of esters of volatile fatty acids, II, 566.
- Grandel, F., vitamin-F, III, 497.
- Grandmontagne, R., variations in the colour of the night sky, I, 229.
- Grandperrin, M., amminonickelous carbonate, I, 156.
- Grandpierre, R., and Franck, C., effect of vagotonin on response to carotid artery occlusion, III, 310. Effect of vagotonin on respiratory effects of caffeine and lobeline, III, 933.
- Franck, C., Stankoff, E., and Vidacovitch, M., effect of vagotonin on the sensitivity of the respiratory centre to carbon dioxide, III, 713.
- Franck, C., and Vidacovitch, M., effect of vagotonin on apnoea following pulmonary hyperventilation, III, 899.
- See also Franck, C., Santenoise, D., and Vidacovitch, M.
- Graney, C. M., hereditary chondrodysplasia, III, 955.
- Grangaard, D. H., Michell, J. H., and Purves, C. B., isolation of a crystalline substance from starches oxidised by periodate, II, 301.
- and Purves, C. B., preparation and determination of glyoxal tetramethyl acetal, II, 140. Glyoxal tetramethyl acetal, II, 201.
- Grangaud, R., washing and separation of barium sulphate in the micro-gravimetric determination of sulphur, I, 384.
- See also Ettore, J.
- Granger, B. See Adams, A. E.
- Granger, R. See Mousseron, M.
- Granick, S., urease distribution in *Soja max*, III, 218. Quantitative isolation of chloroplasts from higher plants, III, 1109. Chloroplast-nitrogen of some higher plants, III, 1109.
- See also Michaelis, L.
- Granit, R., photochemical and electrophysiological research on adaptation in the vertebrate retina, III, 674.
- Holmberg, T., and Zewi, M., action of visual purple on rod cell, III, 134.
- Munsterhjelm, A., and Zewi, M., relation between concentration of visual purple and retinal sensitivity to light during dark-adaptation, III, 836.
- Therman, P. O., and Wrede, C. M., selective effects of different adapting wave-lengths on the dark-adapted frog's retina, III, 37.
- See also Wright, W. D.
- Grant, F., chest leads in electrocardiography, III, 17.
- Grant, R. L., Calvery, H. O., Laug, E. P., and Morris, H. J., influence of calcium and phosphorus on the storage and toxicity of lead and arsenic, III, 413.
- See also Morris, H. P.
- Grasnick, L., evaluation of B-sera for blood group determination, III, 229.
- Grass, A. M., and Gibbs, F. A., Fourier transform of the electroencephalogram, III, 373.
- Grassee, P. P., centromeres and centrosomes in the mitosis of flagellates, III, 1024.
- Grasset, E., typhoid endotoxoid vaccine, III, 1104.
- Grassi, A., experimental re-establishment of cardiac circulation (cardio-pulmonary anastomosis), III, 460.
- Grassmann, E., electron emission of copper, silver, and aluminium on bombardment with ions of high velocity, I, 441.
- See also Diebner, K.
- Gratia, A., adaptation of the Henriot-Huguenard ultra-centrifuge to biological research, III, 946.
- and Paillet, A., antigenic character of virus of "grasserie" of silkworms, III, 432.
- Gratschev, K. J., influence of titanium salts on electrolytic reduction of ferric sulphate, I, 480.
- Gratzianski, M. M. See Plotnikov, V. A.
- Graubard, M., oxidases and peroxidase, III, 421.
- Graue, G., and Riehl, N., diffusion properties and activation of zinc sulphide, I, 67. Diffusion behaviour and porous structure of iron oxide, I, 140.
- Grauer, R. C., and Saier, E., comparison of the distilling and dry ashing methods for determination of blood-iodine, III, 555.
- Grauwlin, P., thermo-electronic study of molybdenum-thoria [filaments], I, 503.
- Grave, G., photosensitivity after administration of uleron, III, 1084.
- Graves, A. C., packing fraction differences among heavy elements, I, 349.
- Graves, (Miss) E. R. See Allison, S. K.
- Graves, J. N., Hughes, G. K., and Lions, F., derivatives of 9:10-dihydroanthracene, II, 155. Heterocyclic compounds derived from pyrocatechol ethers. II. 7:8-Dimethoxy- and 5:6:7-trimethoxyquinolines. III. Synthesis of 1:2-dimethoxyacridine, II, 180.
- Graves, R. W. See Woodhall, B.
- Gravesen, P. B., transitory lung infiltrations with eosinophils, III, 114.
- Gray, E. See Taboury, M. F.
- Gray, E. LeB. See Bills, C. E.
- Gray, H. See Fuson, R. C., Rixford, E., and Robson, G. B.
- Gray, H. W. See Fuson, R. C.
- Gray, J., and Lissmann, H. W., apparatus for measuring propulsive forces of locomotory muscles of earthworm and other animals, III, 1034. Locomotory reflexes in earthworm, III, 1038.
- Gray, J. A., γ -rays of radium-E, I, 293.
- Gray, J. S., Ivy, A. C., and Cuthbert, F. P., conversion of protein into glucose in depancreatised and phloridzinised dogs, III, 607.
- and Wiczorowski, E., development of refractoriness in enterogastrone preparations, III, 985.
- Gray, L. A., and Brack, C. B., effect of oestrogenic hormone on experimental tuberculosis, III, 685.
- and Lawson, H., effect of testosterone propionate on ovulation and luteinisation in the rabbit, III, 1056.
- See also Novak, E.
- Gray, L. H., Read, J., and Mottram, J. C., comparison of the lethal effect of fast neutrons and γ -rays on the growing tips of broad bean roots, III, 1110.
- See also Spear, F. G.
- Gray, R. E. See Randall, L. A., jun., and Robinson, H. E.
- Gray, S. H. See Agress, H., and Probststein, J. G.
- Gray, S. W., and Steggerda, F. R., comparison of the beats in three- and four-chambered hearts, III, 234.
- Gray, T. J., and Travers, M. W., kinetics of the thermal decomposition of tetramethylmethane (neopentane), I, 526.
- Gray, W. H., heterocyclic derivatives of *p*-aminobenzenesulphonamide and 4:4'-diaminodiphenylsulphone, II, 448.
- Graybiel, A. See Chapman, E. M.
- Grayman, I. See Mirsky, I. A., and Nelson, N.
- Grayzel, H. G., and Radwin, L. S., hepatomegaly in juvenile diabetes mellitus treated with pancreatic extract, III, 1058.

- Greathouse, G. A., alkaloids isolated from plants resistant to *Phymatotrichum omnivorum*; their influence on growth of the fungus, III, 438.
- and Watkins, G. M., berberine as a factor in resistance of *Mahonia trifoliata* and *M. swaseyi* to *Phymatotrichum* root rot, III, 1111.
- Greathouse, L. H. See Willard, H. H.
- Greaves, J. D., nature of factor concerned in loss of blood coagulability of bile fistula and jaundiced rats, III, 649. Vitamin-K requirements of the rat, III, 770.
- Greaves, J. E., correlation among various constituents of forage plants, III, 438.
- Greaves, V. D. See Okey, R.
- Grebinnik, L. I., effect of long-continued feeding with acid and basic diets on the animal organism. I. Effect on body-weight. II. Effect of phosphorus and nitrogen metabolism of rabbits. III. Effect on water and total nitrogen and phosphorus contents of rabbit tissues, III, 599.
- Greco, A. See D'Alessandro, G.
- Grecou, A., Ionesco, N. G., and Constantinesco, P., nicotinic acid in pellagra, III, 495.
- Greeley, P. O., Tyler, D. B., and Drury, D. R., sucrose and glucose tolerance in depancreatized dogs, III, 1077.
- See also Drury, D. R.
- Green, A. A. See Fahey, K. R.
- Green, C. A., steel ball mill for bacteriological purposes, III, 1015.
- Green, C. G. See McCarthy, J. F.
- Green, C. H. See Dowdell, R. L.
- Green, D. E. See Corran, H. S., and Straub, F. B.
- Green, D. F., Allison, J. B., Greenwood, W. R., and Morris, M. L., kidney damage in the dog produced by mercury poisoning, III, 188.
- Allison, J. B., and Morris, M. L., renal excretion of sulphanilamide in dogs, III, 81.
- Green, E., and Parke, J. P., density and viscosity of glycerol solutions at low temperatures, I, 605.
- Green, E. H., L_{HI} absorption of iodine, barium, and compounds of barium, I, 406. Optical set-up for measurement of bubble-window thickness, I, 580.
- Green, F. E., double function of ocular muscles, III, 674.
- Green, F. O. See Hurd, C. D.
- Green, G. K., and Alvarez, L. W., heavily ionising particles from uranium, I, 234.
- Green, J. B., and Eichelberger, J. F., Paschen-Back effect. V. Theory of the effect for intermediate coupling, I, 501.
- and Fried, B., Zeeman effect in spectrum of argon, I, 49.
- and Peoples, J. A., jun., Zeeman effect in spectrum of neon, I, 1. Paschen-Back effect. VI. Spectrum of neon, I, 501.
- Green, J. W. See Pacsu, E.
- Green, L. See Emerson, R.
- Green, L. C., new terms in Fe I, II, and III and additional far ultra-violet standards, I, 439.
- Green, L. F., McCarthy, J. F., and King, C. G., inhibition of respiration and photosynthesis in *Chlorella pyrenoidosa* by organic compounds that inhibit copper catalysis, III, 731.
- See also McCarthy, J. F.
- Green, M. H., Renfrew, A. G., and Butler, C. L., cinchona alkaloids in pneumonia. VII. Amyl and hydroxyalkyl apocupreine ethers, II, 457.
- Greenbaum, A., Kerridge, P. M. T., and Ross, E. J., normal hearing by bone conduction, III, 134.
- Greenberg, B. See Loman, J.
- Greenberg, D. See Mahler, A.
- Greenberg, D. M., Boelter, M. D. D., and Knopf, B. W., [neurological] effects of calcium deprivation, III, 251.
- See also Cohn, W. E., Glazko, A. J., and Joseph, M.
- Greenberg, L. A. See Haggard, H. W.
- Greenberg, S. See Urbach, E.
- Greenblatt, R. B. See Greenhill, J. P., and Sanderson, E. S.
- Greenburg, L., Ford, C. B., Burke, W. J., and Dolin, B. H., silica dust exposure in quarries, III, 513.
- Mayers, M. R., and Smith, A. R., systemic effects resulting from exposure to chlorinated hydrocarbons, III, 510.
- Greene, C. H., and Hotz, R., liver and biliary tract, III, 692.
- and Voskuyl, R. J., deuterium-protium ratio. I. Densities of natural waters from various sources, I, 495.
- Greene, H. S. N., heterologous transplantation of human and other mammalian tumours, III, 57. Uterine adenomata in the rabbit, III, 480. Experimental induction of a disorder resembling toxæmia of pregnancy in the rabbit [by anterior pituitary extracts], III, 1054.
- and Saxton, J. A., jun., hereditary brachydactylia and allied abnormalities in the rabbit, III, 643.
- See also Saxton, J. A., jun.
- Greene, J. A., and Gibson, R. B., co-existence of diabetes mellitus and diabetes insipidus, III, 380.
- Swanson, L. W., and Heeren, R. H., plethysmograph recording of respiration, III, 23.
- Greene, R. A., [determination of] hydrocyanic acid in glucoside-bearing materials, III, 221.
- See also Breazeale, E. L.
- Greene, R. D., preparation of vitamin from natural sources, III, 1071.
- Greene, R. R., and Burrill, M. W., masculinisation of female rats by post-partum treatment with anterior-pituitary-like hormone, III, 1054.
- Burrill, M. W., and Ivy, A. C., progesterone is androgenic, III, 483. Experimental intersexuality: modification of sexual development of white rat with synthetic oestrogen, III, 1053.
- and Dorr, E. M., clinical use of oestradiol dipropionate, III, 587.
- Wells, J. A., and Ivy, A. C., progesterone will maintain adrenalectomised rats, III, 912.
- and Wigodsky, H. S., effect of local application of testosterone in an ointment on growth of penis in the rat, III, 267.
- See also Burrill, M. W., and Wells, J. A.
- Greenebaum, R. S. See Loeb, L. M.
- Greenfield, C. R. M. See Thompson, A. R.
- Greenfield, J. G., cerebral oedema in intracranial tumours, III, 830.
- and Holmes, J. M., spinal cord changes in pellagra, III, 603.
- Greengard, H., and Ivy, A. C., isolation of secretin, III, 270.
- Greenhalgh, R. K., and Polanyi, M., hydrogenation and atomic exchange of benzene, I, 322.
- See also Horrex, C.
- Greenhill, J. P., and Freed, S. C., virilism in women caused by androgenic therapy for menstrual disturbances, III, 1056.
- and Greenblatt, R. B., relationship of thecoma to granulosa-cell tumour, III, 381.
- See also Freed, S. C.
- Greenhouse, L. I., and Lerman, G. M., application of spectral analysis to determination of calcium, sodium, potassium, and strontium in production of rare elements, I, 39.
- Greenlee, S. O. See Shriner, R. L.
- Greenstein, J. L., and Henyey, L. G., spectra of two reflexion nebulae, I, 501. Diffuse nebulae, I, 501.
- See also Henyey, L. G.
- Greenstein, J. P., multivalent amino-acids and peptides. XI. Synthesis of diglycyl-L-cystine, II, 249. Thiol groups in proteins. II. Edestin, excelsin, and globin in solutions of guanidine hydrochloride, carbamide, and their derivatives. III. Effect on ovalbumin of various salt of guanidine, II, 294; III, 1095.
- and Klemperer, F. W., aspartylhistidine, II, 284.
- Klemperer, F. W., and Wyman, J., jun., physical chemistry of cystine peptides, I, 517.
- See also Edsall, J. T.
- Greenstein, L. See Kremer, C. B.
- Greenstein, N. M. See Levy, W.
- Greenwald, H. M., acute hæmolytic anæmia, III, 115.
- Greenwald, I., antagonism between sodium and magnesium ions in their action on oxalate ion, I, 200. Anomalous effect of magnesium chloride on the dissociation of weak acids, I, 262.
- Greenwood, A. W., and Blyth, J. S. S., influence of testis on sexual plumage in the domestic fowl, III, 54. Modification of the accessory sex apparatus of the hen, III, 144.
- and Chu, J. P., thyroid and sex gland function in brown Leghorn fowl, III, 840.
- Greenwood, M., occupational and economic factors of mortality, III, 619.
- Greenwood, W. R. See Green, D. F.
- Greep, R. O., and Hisaw, F. L., pseudo-pregnancies from electrical stimulation of the cervix in the diæstrum, III, 262.
- See also Astwood, E. B.
- Greeven, R., early development of the sympathetic trunk of *Bombinator nachu-pus*, III, 224.
- Greey, P. H., experimental studies with sulphanilamide and other compounds, III, 305.
- Boddington, G. D. M., and Little, M. H., sulphanilamide and related compounds in experimental tuberculosis, III, 999.
- Campbell, H. H., and Culley, A. W., effect of sulphanilamide on experimental tuberculosis in the guinea-pig, III, 304.
- MacLaren, D. B., and Lucas, C. C., comparative chemotherapy in experimental pneumococcal infections, III, 858.
- See also Mitchell, D. R.
- Gregersen, A. See Fishback, H. R.

- Gregersen, M. I., and Stewart, J. D., simultaneous determination of the plasma volume with T-1824 and the "available fluid" volume with sodium thiocyanate, III, 448.
- See also Bernstein, A. O., and Haklin, E.
- Gregg, D. E., and Dewald, D., immediate effects of coronary sinus ligation on dynamics of coronary circulation, III, 20.
- Immediate effects of occlusion of the coronary veins on collateral blood flow in the coronary arteries, III, 236.
- Immediate effects of the occlusion of the coronary veins on the dynamics of the coronary circulation, III, 1031.
- Gregg, S. J., and Widdowson, E. E., portable motor-driven apparatus for depositing built-up molecular films, I, 539.
- Evaporation of built-up molecular films, I, 609.
- See also Widdowson, E. E.
- Gregoire, J. See De Chézelles, N., and Khouvine, (Mme.) Y.
- Grégoire, R., stable and radioactive nuclei, I, 52.
- Gregor, U. See Schwarz, R.
- Gregori, A., action of X-rays on bone marrow *in vivo* and *in vitro*, III, 868.
- Gregory, F. G., and Purvis, O. N., vernalisation of cereals. III. Use of anaerobic conditions in the analysis of the vernalising effect of low temperature during germination, III, 107.
- and Woodford, H. K., apparatus for study of oxygen, salt, and water uptake of various zones of the root: preliminary results with *Vicia faba*, III, 798.
- See also Heath, O. V. S.
- Gregory, K. K. See Cutts, M.
- Gregory, P. W., Asmundson, V. S., and Goss, H., glutathione concentration and hereditary size. V. Barred Plymouth Rock and white Leghorn embryos, III, 112.
- Gregory, R. A., now oxygenator for blood-perfused hearts, III, 563.
- See also Bogue, J. Y., and Braun-Menendez, E.
- Greiff, D., thermo-regulator and relay assembly, I, 432.
- Greig, K. A., uterine motility cycle in guinea-pig, III, 686.
- Greig, M. E., and Munro, M. P., effects of pyrophosphate on metabolism of tissues, III, 408.
- Munro, M. P., and Elliott, K. A. C., metabolism of lactic and pyruvic acids in normal and tumour tissues. VI. Ox retina and chick embryo, III, 609.
- Greisheimer, E. See Hafkesbring, R.
- Grelet, N., intraperitoneal sclerosis produced by contact with kieselguhr in vitamin-A starved rats, III, 1068.
- Grembergen, G. van, fumaric, succinic, and lactic acids in muscle during glycolysis, III, 25.
- Gremels, H., influence of urea on kidney function, III, 66.
- Grenade, A., neuro-hepatic complex in cow embryo, III, 642.
- Grenley, P. See Hotchkiss, R. S.
- Grennerich, H. See Schafer, K.
- Grether, W. F., colour vision and colour blindness in monkeys, III, 1043.
- See also Maison, G. L.
- Greulich, W. W., and Thoms, H., dimensions of the pelvic inlet of 789 white females, III, 444.
- Greup, J. See Boeseken, J.
- Greutter, J. E. See Muether, R. O.
- Greval, S. D. S., Chandra, S. N., and Woodhead, L. S. F., M and N in blood group: technique of typing anti-fluid; findings in 300 Indians, III, 814.
- Greven, K. See Wezler, K.
- Greville, G. D., effect of calcium on tissue respiration; determination of oxalacetic acid, III, 706.
- See also Ström-Olsen, R.
- Grevy, J., action of ammonia on colloids, I, 522.
- Grewe, R., syntheses in the phenanthrene series. I.—III, II, 159, 264, 369.
- Gribenski, A., reoxidation of leuco-derivatives of dyes by *B. coli* in presence of nitrates, III, 525.
- Gridgean, N. T., Lees, H., and Wilkinson, H., biological vitamin-D assay of low-potency materials with reference to role of mineral content of the diet, III, 705.
- Gridnev, V., and Kurdjumov, G., influence of nickel on the solubility limits of the α -phase in copper-aluminium alloys, I, 313.
- Griebel, C., superficial glossitis and hypovitaminosis-B₁, III, 702.
- Does human milk contain lactoflavin (vitamin-B₂)? III, 988.
- Griebel, R. See Helferich, B.
- Grieco, E. H., and Schwartz, P., mechanism of the dying heart, III, 123.
- Grieg, J. W., system $\text{Na}_2\text{O}, \text{Al}_2\text{O}_3, 2\text{SiO}_2$ (nephelite, carnegieite)- $\text{Na}_2\text{O}, \text{Al}_2\text{O}_3, 6\text{SiO}_2$ (albite), I, 201.
- Griem, W. B., biological methods for assay of vitamin-D carriers, III, 169.
- Grieve, B. J., epinastic response induced in plants by *Bacterium solanacearum*, E.F.S., III, 1018.
- Grieve, J., and White, James, system $\text{FeO}-\text{TiO}_2$, I, 322.
- Grieve, J. L. See Boyes, W. H. D.
- Griffen, A. B. See Cumley, R. W.
- Griff, F. See Brüll, L.
- Griffin, C. W., sorption of hydrogen on supported nickel, I, 195.
- Griffin, F. P. See Parker, W. E.
- Griffin, M., Osterberg, A. E., and Braasch, W. F., blood-calcium, -phosphorus, and -phosphatase in urinary lithiasis, III, 121.
- Griffioen, K., presence of true lignin in plant material, III, 439.
- Griffith, F. R., jun., Lockwood, J. E., and Emery, F. E., adrenaline and blood-lactic acid: effect of evisceration, III, 478.
- Adrenaline hyperglycemia; proportionality with dose, III, 1051.
- See also Cammer, L.
- Griffith, H. D., Irving, J. T., and Mason, E. M., influence of ingested radioactive materials on the thyroid gland of rats, III, 679.
- See also Thomson, A. M.
- Griffith, H. R., two unusual complications in patients under cyclopropane anaesthesia, III, 314.
- Griffith, J. Q., jun., Comroe, B. I., and Zinn, C. J., blood volume in ergotamine tartrate poisoning in rats, III, 892.
- and Roberts, E. [with Campbell, R.], mechanism of vascular hypertension following intracisternal injection of kaolin in the rat, III, 238.
- Zinn, C. J., and Comroe, B. I., effect of sympathectomy on the vasa vasorum of the rat, III, 19.
- See also Lindauer, M. A.
- Griffith, R. H., and Hill, S. G., catalytic oxidation of carbon disulphide and carbonyl sulphide, I, 88.
- See also Crawley, B.
- Griffith, R. O. See Callow, A. E., and Clarkson, L. S.
- Griffith, W. H., and Wade, N. J., effects of low-choline diets, III, 1066.
- Griffith, W. O. See Sachs, A.
- Griffiths, E. See Sherratt, G. G.
- Griffiths, G. M., structure of hypothalamus, III, 667.
- See also Walter, W. G.
- Griffiths, J. H. E., absorption of neutrons of medium energy, I, 349.
- and Maegraith, B. G., distribution of radioactive sodium after injection into the rabbit, III, 502.
- Griffiths, M., sympathetic character of the nucleus supraopticus, III, 372.
- Secretory cells of neuro-hypophysis and their relation to neuroglia, III, 1047.
- Griffiths, R. B. See Frankhauser, G.
- Griffiths, W. J. See De Wesselow, O. L. V. S.
- Griffitts, J. J. See Ecker, E. E.
- Griffon, H., crystalline, triethanolamine iodomercurate, II, 52.
- and Le Breton, R., identification of poisoning due to barbituric derivatives, III, 618.
- Identification of poisoning due to chloralose, III, 780.
- Griggs, D., and Bell, J. F., experiments bearing on the orientation of quartz in deformed rocks, I, 110.
- Griggs, M. A., use of the Lundgårdh spectrographic method, III, 536.
- Griggs, O. J. See Lauter, W. M.
- Grigoraki, L., and David, Roger, biochemical characters of *Trichophyton crateriforme* and *Achorion violaceum*, III, 328.
- Biochemical characters of *Microsporium canis* (Bodin, 1897), Grigoraki and Guart, *emend.* 1928, III, 525.
- Biochemical characters of *Trichophyton asteroides* (Sabouraud, 1909), III, 873.
- Biochemical characters of *Endodermophyton indicum* (Castellani, 1911), III, 944.
- Biochemistry of *Trichophyton lacticolor* (Sabouraud, 1910), III, 1011.
- Grigoreev, D. P., synthesis and investigation of biotite, I, 107.
- Grigoriev, D. P., effect of alumina on the optical properties of tremolite, I, 588.
- Grigoriev, P., and Rapoport, M., new serological reaction in diagnosis of syphilis, III, 631.
- Grigorov, K. V., fixation of magnetic suspension patterns, I, 44.
- Grigorovici, R., discharge potential of pure mercury vapour, I, 166.
- Grijns, G., E-vitamins, III, 497.
- Grill, H. See Berger, W.
- Grillet, L., and Duffieux, P. M., dissociation of nitrogen peroxide in the silent electric discharge, I, 208.
- Grilli, M., changes in post-rotatory ocular reaction due to unilateral stimulation by light, III, 466.
- Grillot, E., lead acetato-halides, I, 333.
- Neutral and basic lead monochloroacetates, II, 47.
- Grills, R. C. See Brown, O. W.
- Grim, R. E., and Allen, V. T., petrology of Pennsylvanian underclays of Illinois, I, 110.
- Grimaldski, V., and Hohor, V., [salinity of] Raseln lakes, I, 391.
- Grimaud, (Mme.) L. See Rimattei, F.
- Grimberg, A., Chamraeff, and Fellier, comparative effects of heparin and sodium citrate on leucocytes and alexin, III, 960.
- Grimm, H. G., inorganic giant molecules, I, 129.
- See also Brill, R.

- Grimmett, L. G. See Nahmias, M. E.
- Grimson, K. S., onset of renal ischaemia hypertension induced by readily adjustable renal artery clamps, III, 561.
- and Shen, T. C. R., effects of phenylaminopropane, methyltetrahydroisoquinoline, histamine, peptone, and shock on carotid sinus reflexes, III, 822. Influence of benzedrine, N-methyltetrahydroisoquinoline, histamine, peptone, and anaphylactic shock on carotid sinus vasomotor reflexes, III, 966.
- See also Bouckaert, J. J.
- Grinberg, F. A., synthesis of alkyl-substituted carbamides, II, 204.
- Grinker, R. R., and Serota, H., cortico-hypothalamic relations in the cat and man, III, 372.
- Grinstein, M., Robertson's refractometric method for determination of serum-proteins, III, 232.
- Grinten, W. van der, theory of the process of Clusius and Dickel for the separation of gas mixtures, I, 390.
- Grisoni, R., experimental allergic reactions of the brain, III, 34.
- Grivet-Meyer, (Mme.) T., secondary effects of cosmic rays in lead, I, 351.
- Groat, W. A. See Wyatt, T. C.
- Grob, A. See Ruzicka, L.
- Grochowska, A. See Krause, A.
- Grodberg, B. C., and Carey, E. L., seventy-five transfusions with placental blood, III, 353.
- Grodde, K. H., variation with temperature of electrical and magnetic double refraction of liquids, I, 10.
- Grodinsky, M., and Holyoke, E. A., fasciae and fascial spaces of the head, neck, and adjacent regions, III, 441.
- Grodzensky, D., electrokinetic potential of trypanosomes, III, 195.
- Grodzinski, Z., morphology of egg yolk under normal and experimental conditions, III, 807.
- and Marchlewski, J., influence of serum on motility of spermatozoa of the domestic cock, III, 52.
- Groedel, F. M., how far does situation of indifferent electrode influence electrocardiographic unipolar chest leads? III, 744. How far is asynchronism of R waves of right and left electrocardiogram influenced by different placement of indifferent electrode? III, 744. How far is unipolar chest electrocardiogram influenced when led at same time to two or three electrically connected extremities? III, 744.
- Green, J., and Schuyt, J. W., relation of lactoflavin content to residual tissue respiration in the case of rat tissues poisoned by cyanide, III, 171.
- Green, N. J. A., and Wielen, P. van der, determination of strychnine and brucine in mixtures of both, II, 134.
- Gronblom, B. O., β -decay and spin of light nuclei, I, 591.
- and Marshak, R. E., binding energy of $4n$ -nuclei on the α -particle model, I, 176.
- Groenewold, H. J., velocity of sound in liquid helium, I, 66.
- See also Laer, P. H. van.
- Groetzing, G., and Harkins, W. D., investigation of electrical properties of multilayers, I, 255.
- Grognot, P. See Florentin, P.
- Groll, H. P. A., Hearne, G., Rust, F. F., and Vaughan, W. E., halogenation of hydrocarbons; chlorination of olefines and olefine-paraffin mixtures at moderate temperatures; induced substitution, II, 529.
- Grollman, A., role of adrenal glands in animal economy, III, 1050.
- See also Gersh, I., and Williams, J. R.
- Grolnick, M., contact dermatitis. III.
- Active sensitisation with *Krameria* in man, III, 92.
- Gromakov, S. D., determination of surface tension by Jäger's method without knowing the density of the liquid, I, 582.
- Gromet, R. Y. See Ferguson, C.
- Gromzwa, K. E. See Falin, L. I.
- Gronchi, V., combined effect of nicotine and induced current on the isolated, right atrium of rabbit's heart, III, 182.
- Triphasic effect of nicotine on the isolated, right atrium of rabbit's heart, III, 182.
- Effect of nicotine on the rabbit's auricle, III, 454.
- Barium and cardiac automatism, III, 657.
- Mechanism of the cardiac action of nicotine. I.—III, III, 712.
- Perfusion *in situ* of the right auricle of rabbit's heart, III, 744.
- Gronemeier, K. See Brigl, P.
- Gronemeyer, W., allergic reaction to menthol, III, 716.
- See also Orzechowski, G.
- Gropper, L., second virial coefficient of helium gas for the lowest measured temperature, I, 410.
- Gros, G. See Courrier, R.
- Gros, W., Takata reaction in serum and plasma, III, 11.
- Coagulation reaction with Havem's solution, III, 815.
- Groschev, L. V., and Frank, I. M., production of pairs in nitrogen by γ -rays, I, 115.
- Grosdenis, (Mme.) O., and Fritz, R., isolation of an aluminium carbonate, I, 574.
- Grosgurin, J. R., multiple myeloma, III, 448.
- Gross, B. (Brazil), latitude effect of cosmic rays, I, 175.
- Gross, F. See Matthes, K.
- Gross, F. (Göteborg). See Pettersson, H.
- Gross, F. (Leningrad), and Vuks, M., polarisation of low-frequency lines of scattering in crystals, I, 180.
- Gross, H., and Handler, B. J., sclerosis of the superior vena cava in chronic congestive heart failure, III, 821.
- Gross, L. See Besredka, A.
- Gross, P., Cooper, F. B., and Lewis, M., sulphanilamide therapy of Friedländer-bacillus infections of mice, III, 304.
- Repair in experimental pneumococcal meningitis, III, 673.
- Chemotherapy of experimental type II pneumococcal meningitis, III, 927.
- Urinary concretions caused by sulphapyridine, III, 1000.
- Chemotherapy of experimental rabies of rats, III, 1081.
- Rintelen, J. C., and Saylor, J. H., energy and volume relations in the solubilities of some ketones in water, I, 194.
- See also Cooper, F. B.
- Gross, R. E., use of vinyl ether (vinethene) in infancy and childhood, III, 615.
- and Hubbard, J. P., surgical ligation of a patent ductus arteriosus, III, 561.
- Gross, S. See Dameshek, W.
- Gross, S. T. See Clark, G. L.
- Grosseurth, C. H., hypoplasia of the femur, III, 278.
- Grosse, A. V., actinium series of radioactive elements and their influence on geological age measurements, I, 293.
- Booth, E. T., and Dunning, J. R., fission of protactinium, I, 546.
- and Linn, C. B., refraction data on liquid C_3 hydrocarbons, I, 242.
- Mavity, J. M., and Ipatiev, V. N., reactions of paraffins with aromatic hydrocarbons. I. Various paraffins with benzene. II. Aromatic hydrocarbons and $\beta\beta\delta$ -trimethylpentane, II, 13, 102.
- See also Pines, H., and Rosenbaum, E. J.
- Grossenbacher, K. A. See Skoog, F.
- Grossfeld, H., osmotic pressure, electrolytes, and tissue cells, III, 195.
- Grossi, G., phosphoglyceric dehydrogenase activity of uterine fibroma, III, 848.
- Grossman, A. See Levine, R.
- Grossman, A. M. See Quick, A. J.
- Grossman, E. B., preparation or extracts of the renal pressor substance, III, 152.
- and Williams, J. R., relation to age to renal pressor substance, III, 240.
- See also Soffer, L. J., and Williams, J. R.
- Grosso, O. See Fournier, J. C. M.
- Grosz, S., importance of the B-vitamins in ophthalmology, III, 751.
- Pathogenesis and treatment of Sjogren's syndrome, III, 765.
- Grotepass, W. See De Langen, C. D.
- Groth, H., and Skurnik, L., intravenous saturation with vitamin-A, III, 1068.
- See also Skurnik, L.
- Groth, W., photochemistry in the Schumann ultra-violet [region of the spectrum], I, 272.
- Enrichment of xenon isotopes and their detection, I, 292.
- Origin of labyrinth and ganglion statoacousticum in rabbit, III, 839.
- and Harteck, P., separation of isotopic molecules in a direct-current glow discharge, I, 424.
- Enrichment of mercury isotope by a separation tube method, I, 627.
- Grotheer, W., fatigue phenomena of electron-irradiated luminous substances, I, 401.
- Grotian, W., explanation of the lines in the spectrum of the solar corona, I, 290.
- Grott, J. W., carbohydrate metabolism in pancreatitis, III, 300.
- Action of acranil in lambliasis, III, 504.
- Groven, L., X-rays emitted in the discharge between external electrodes by sustained waves, I, 168.
- Groves, L. G., determination of dipole moments in the vapour phase. I. An improved apparatus, I, 492.
- See also Baker, J. W.
- Groves, (Miss) R. C., exfoliation of vermiculite by chemical means, I, 588.
- Grubb, H. M., and Hunt, H., dielectric constant of conducting solutions, I, 250.
- Grubb, T. C. See Shaughnessy, H. J.
- Grube, G., and Ganpp, W., polarisation of electrolytic liberation of oxygen from nickel-iron and nickel-cobalt alloys in alkaline solution, I, 325.
- and Grube, H. L., electrochemistry of niobium, I, 35.
- Grube, H. L. See Grube, G.
- Gruber, C. M., and Gruber, C. M., jun., action of barbiturates on rabbit's uterus, III, 932.
- See also Haury, V. G.
- Gruber, C. M., jun. See Gruber, C. M., and Haury, V. G.
- Gruber, E. E. See Adams, R.

- Gruber, G. B., metaplasia, III, 113.
- Gruehl, H. L. See Ratner, B.
- Grünberg, A. A., and Katz, N. N., volumetric determination of iridium in presence of Co^{II} , Ni^{II} , Cr^{III} , and Bi^{III} , I, 279.
- and Rjabtschikov, D. I., potentiometric titration of complex compounds with several oxidisable components, I, 103.
- Grünberg, G. J., and Berman, L. V., surface tension in biological systems. I. Tension of active and inactivated blood serum in different species, III, 1094.
- and Bukvina, A. A., surface tension in biological systems. II. Tension of digestive juices and of solutions of certain enzymes in active and inactivated states, III, 1094.
- Grünberg, H. See Feulgen, R.
- Grüneberg, H. See Fell, H. B.
- Grüner, G. See Böhm, F.
- Grüninger, U., Ksinsk, H., and Scheurenberg, G., dosage and effect of noctal in children, III, 411.
- Grünthal, E., corpus, mamillare and Korsakow syndrome, III, 829. Vitamins and the nervous system, III, 918.
- Grüntzig, W., m.p. alternation of the higher triglycerides [of single fatty acids], I, 248.
- Gruescu, C. See Nenitzescu, C. D.
- Grützmacher, C. H., paranoid-hallucinatory syndrome in pernicious anaemia, III, 351.
- Gruetzmacher, J., uni-directional source of ultrasonic waves, I, 434.
- Grulee, C. G., Sanford, H. N., and Lewison, M., irradiated evaporated milk as food for infants, III, 848.
- Grumbach, A., and Schnetz, A., serological differentiation of enterococci, III, 103.
- Grumbein, M. L. See Macht, D. I.
- Grumbrecht, P., and Loeser, A., effect of thyroid substances on ovarian function, III, 974. Action of oestrogenic substances on the isolated uterus, III, 980.
- Loeser, A., and Erbacher, K., uterus as hormonal regulator of ovarian function, III, 586.
- See also Arnold, O.
- Grumetz, M., structure and absorption spectra of polymerides of aromatic compounds having a propenyl or isopropenyl side-chain, I, 7.
- See also Ramart-Lucas, (Mme.) P.
- Grundland, I., and Bulliard, H., hyperpolyptidemia and growth of tumours, III, 990.
- See also Bulliard, H.
- Grundmann, C., and Löw, I., fate of partly hydrogenated aromatic compounds in the animal organism, III, 175.
- See also Kuhn, R.
- Grundmann, W., development and problems in liquid thermometry, I, 432.
- Grundström, B., predissociation in the spectra of diatomic molecules, I, 6.
- Gruner, J. W., magnetite crystals from meteoric solutions, I, 585. Ammonium mica synthesised from vermiculite, I, 586.
- Gruner, O. C., blood-culture as an aid to diagnosis of carcinoma and sarcoma, III, 598.
- Gruner, R., penetration of heat in baths, III, 277.
- Grunke, W., *B. coli* infection of the duodenum [and gastric acidity], III, 64. Determination of heparin in blood, III, 648.
- Grunke, W., and Frommelt, H., effect of ultra-violet light on the reticulocyte count, III, 646.
- and Koletzko, J., action of urine on plasma coagulation III, 815.
- Grunow, H. See Leuchs, H.
- Gruntfest, I. J. See Foster, L. S.
- Grunz, M. See Werle, E.
- Gruschvitski, V. E. See Feigelson, I. B.
- Gruskin, B. J. See Rawls, W. B.
- Gruzewska, Z., and Roussel, G., manganese in tissues; manganese in foetal liver during development, III, 843. Determination of zinc in organic tissues in presence of iron, copper, manganese, and magnesium, III, 886.
- Grynfielt, J., cytological study of mammary gland secretion, III, 266. Cytological study of the various colostriferous secretions from the human breast, III, 266.
- Gsell, O., serum-protein and bone-marrow changes in lymphogranuloma inguinale, III, 817.
- Gstirner, F., chemical methods of determining vitamin-C, III, 403.
- Gualtiero, L., mechanism of vertigo, III, 829.
- Gualtierotti, clinical application of the electro-encephalogram, III, 749.
- See also Gerbi, C.
- Guareschi, C., constancy of the number of cells in the labial glands of *Telmatoscopus meridionalis*, III, 889.
- Guareschi, P., compressibility coefficient of liquids, I, 363. Coefficient of thermal conductivity of liquids and its variation with temperature, I, 363.
- Guarnaschelli-Raggio, A., action of β -p-hydroxyphenylisopropylmethylamine, III, 85.
- Guastalla, J., very dilute films of proteins; attempt to determine mol. wts., I, 316. Surface (film) pressure gauge with hanging suspension, I, 390.
- Gubelbank, S. M. See Fonomarev, V. D.
- Gubner, R., Schnur, S., and Crawford, J. H., carbon dioxide inhalation test of circulation time, III, 822.
- See also Master, A. M.
- Gubser, H. See Furter, M.
- Gucker, F. T., jun., Ford, W. L., and Moser, C. E., apparent and partial molal heat capacities and volumes of glycine and glycollamide, I, 133.
- Gage, F. W., and Moser, C. E., densities of aqueous solutions of carbamide at 25° and 30° and the apparent molal volume of carbamide, I, 16.
- and Moser, C. E., coefficient of expansibility of aqueous solutions of carbamide at 27.5° calculated from the densities at 25° and 30°, I, 464.
- Pickard, H. B., and Planck, R. W., micro-calorimeter; heats of dilution of aqueous solutions of sucrose at 20° and 30° and their heat capacities at 25°, I, 201.
- Guckes, E. See Hollmann, W.
- Gudgeon, H. See Bennett, G. M.
- Gudjons, H. F. See Hahn, G.
- Gudlet, M. A., gas regime of *A. niger* as related to citric acid formation, III, 100. Gas metabolism of *A. niger*, III, 100. Changes in oxidation-reduction potential during citric acid formation, III, 100.
- Kirsanova, V. A., and Makarova, V. V., salt metabolism of *A. niger* as related to citric acid formation, III, 100.
- Guében, G., absorption method for study of β -particles of high energy, I, 52. Artificial disintegration and radio-activation. II, I, 53.
- Gueffroy, W., and Luce, F., industrial exposure to the vapours of benzene and its homologues, III, 95.
- See also Ehrhardt, W.
- Guélin, A. See Pozerski, E.
- Gülzow, M., and Afendulis, T. C., gastroscopy in dogs with stomach fistula, III, 62. Gastritis following congestion, III, 147.
- See also Afendulis, T. C.
- Guénin, J. See Régnier, J.
- Günther, E. See Helferich, B.
- Günther, G., and Bonhoeffer, K. F., introduction of heavy hydrogen into the growing organism. VI. Biological synthesis of fats, III, 79.
- Holm, K., and Strunz, H., structure of solid hydrogen fluoride, I, 457.
- Günther, Gunnar. See Adler, E., Euler, H. von, and Schlenk, F.
- Günther, G. W., delayed collapse [due to uleron], III, 503.
- Günther, H., horizontal head circumference and maximal head length index, III, 154. Build of eunuchs and eunuchoids, III, 481. Stature of eunuchs and eunuchoids, III, 590.
- Günther, O. See Hermann, F.
- Günther, Paul, and Holzapfel, L., decomposition of water vapour by X-rays, I, 88. Decomposition of steam by X-rays, I, 330.
- Günther, Ph. See John, W.
- Günther-Schulze, A., Bar, W., and Winter, A., electron liberation through impact of positive ions on the cathode in a glow discharge. IV. Relation between γ values and the work of liberation of the electrons and the effect of this relationship on the mechanism of the normal glow discharge, I, 114.
- Betz, H., and Kleinwachter, H., diffusion of hydrogen and deuterium through iron. I. Iron as cathode in a glow discharge, I, 193.
- and Winter, A., diffusion of hydrogen and deuterium through iron. II, I, 463.
- Güntzel, B., hydrogenation of isoergosterone, II, 367.
- See also Windaus, A.
- Guercio, F., and Pezzini, M., abolition of secondary variations in arterial pressure by administration of ergotamine, III, 457. Effect of corpus luteum on hypogastric stimulation of the rabbit's uterus, III, 480. Fibres innervating the uterine musculature: effect of ergotamine, cocaine, and atropine on the [rabbit] uterus *in situ*, III, 480. Effect of stimulation of hypogastric nerve on the rabbit's uterus, III, 480. Sympatholytic effect of ergotamine, III, 612.
- See also Piacentini, F.
- Guérillot, J., chlorides and vegetation, III, 635.
- Gnérin, H., alkaline earth arsenates; system $\text{As}_2\text{O}_5\text{-BaO-H}_2\text{O}$ at 17°, I, 27. Calcium arsenates; system calcium oxide-arsenic pentoxide-water at 17°, I, 380.
- Guérin, M. See Marchal, S., and Oberling, C.
- Guérin, P. See Marchal, S., and Oberling, C.

- Guerrant, N. B., Dutcher, R. A., and Chornock, F., influence of exercise on the growing rat in presence and absence of vitamin-A, III, 1068.
- and Rudy, W. J., comparative nutritive value of firm and watery egg-albumin, III, 917.
- See also Knight, C. A.
- Guerrant, R. E., and Hogan, A. G., effect of amino-acids on anaemia caused by deaminised caseinogen, III, 607.
- Guerrero, T. H. See Cattaneo, P.
- Gnerry, D. See Waddell, W. W., jun.
- Gürtler, J., fluctuation phenomena in γ -rays, I, 1, 231.
- Guertler, J., Krause, H., and Voltz, F., system aluminium-zinc, I, 313.
- Guest, G. H., colorimetric determination of proline, II, 528.
- and McFarlane, W. D., colorimetric determination of pyrrole with isatin and the application of the method to biological materials, II, 464.
- See also McFarlane, W. D.
- Guest, G. M., modified van Allen hæmatocrit tube providing for the automatic volume adjustment of the blood sample, III, 8.
- Brown, E. W., and Wing, M., variability in number, size, and hæmoglobin content of the erythrocytes during first 5 years of life, III, 1024.
- and Wing, M., method for determining erythrocyte fragility, using van Allen hæmatocrit tubes, III, 648.
- See also Rapoport, S.
- Guest, W. L., and Lewis, W. C. M., effect of electrolytes upon the interfacial tension between water and decalin (*trans*-decahydronaphthalene), I, 368.
- Güttich, and Möhrer, determination of water pressure as function of labyrinth in fish, III, 905.
- Guevara, J. de D. See Gurmendi, G.
- Guggemos, H. See Fischer, Hans.
- Guggenheim, E. A., grand partition functions and so-called "thermodynamic probability," I, 190. Statistical mechanics of co-operative assemblies, I, 193.
- Guggenheim, L. See Liechti, A.
- Guggisberg, H. See Kausche, G. A.
- Guggolz, E., conductivity measurements by means of a heterodyne method, I, 221.
- Guha, B. C. See Saha, K. C.
- Guha, N. C. See Spath, E.
- Guha, P. C., *para*-bridge formation with ethyl succinosuccinate. I. Formation of dicyclo-[1:2:2]-heptane, dicyclo-[2:2:2]-octane, and dicyclo[3:2:2]-nonane systems, II, 429.
- and Krishnamurthy, C., *para*-bridge formation with ethyl succinosuccinate. II. Synthesis of dicarboxy-suberic ester and its cyclisation to dicyclo-[2:2:2]-octanedione by double Dieckmann condensation, II, 430.
- and Muthanna, M. S., syntheses in the thujane group. V. Synthesis of umbellulonic [2-acetyl-1-isopropylcyclopropane-1-carboxylic] acid. VI. New synthesis of umbellularic acid; attempted preparation of thujadi-carboxylic and thujaketonic acid. VII. Complete synthesis of thujone, II, 66, 68.
- and Ranganathan, S. K., *para*-bridge formation with ethyl succinosuccinate. III. Resolution of dicyclo-[2:2:2]-octane-2:5-dione-1:4-dicarboxylic acid into optical antipodes, II, 430.
- Guha, P. C., and Rao, P. L. N., syntheses in the pinane group. V. Configuration of bromo- and hydroxy-pinic acids, II, 66.
- and Sankaran, D. K., syntheses in the carane group. III. Synthesis of carane, II, 64.
- Guha, R. C. See Mukerji, B.
- Guha, S. H., dyes derived from acenaphthenequinone. VII. 2-(5-Chloro)thionaphthenacenaphthyleneindigos, II, 337.
- Guha, S. K., indigoid vat dyes of the isatin series. III. 3-Indole-2'-(4'-methyl)thionaphtheneindigos, II, 90. Preparation of 2-hydroxy-6-methylthionaphthen and its condensation with isatin, II, 395.
- Guha-Sircar, S. S. See Moktader, A.
- Guhr, G., treatment of hyperemesis gravidarum, III, 401. Vitamin-B₁ metabolism, III, 850. Biological determination of vitamin-B₁ content of blood with *Phycomyces blakesleeanus*, III, 920.
- Guibianski, L., limits of "cold" inflammation of ethyl ether, I, 149.
- Guichard, F., *Gleditschia australis*, Hems., III, 218.
- Guichard, M. See Baxter, G. P.
- Guild, H. See Dobriner, K.
- Guile, R. L. See Huston, R. C.
- Guillain, G., and Messimy, R., olfactory disturbances in Paget's disease, III, 1044.
- Guillain, J. See Bertrand, I.
- Guillaud, C. See Hocart, R.
- Guillaume, F. See De Mallemann, R.
- Guillaumin, M. See Weinberg, M.
- Guillaumin, G. O., determination of bilirubin in blood serum, III, 450.
- See also Decourt, J.
- Guillemet, B., and Mandel, P., nitrogen excretion in dog during protein lack and fasting, III, 1077.
- Guillemet, R., carbon balance in alcoholic fermentation, III, 872. Carbon balance of alcoholic fermentation and the relationship of the end products to the sugar utilised for some oses and holosides, III, 1010.
- See also Fontaine, R.
- Guillemonat, A., oxidation of ethylenic hydrocarbons by selenious anhydride, II, 135.
- See also Chiurdoglu, G.
- Guillerm, J. See Bernard, P. N.
- Guillet, R. See McCullagh, R. D.
- Guillien, R., dielectric constant of ammonium sulphate in the neighbourhood of the λ -point, I, 356. Dielectric constants of the ammonium halides, I, 405.
- Guilliermond, A., lipins (phosphatides and sterols) in the vacuoles of vegetable cells, III, 536.
- and Gautheret, R., supposed reducing action of chondriosomes towards Janus-green, III, 731. Effect of p_H on vital staining of yeasts, III, 790. Determination of η_H of yeast cells (*Saccharomyces cerevisiae*), III, 872.
- Gautheret, R., and Buchy, A., accumulation of vital dyes by yeast cells as an adsorption phenomenon, III, 942.
- Guillot, G. See Descazeaux, J.
- Guilmart, (Mme.) T., ultra-violet absorption of oximes in the solid state, I, 239.
- Guinier, A., diffusion of X-rays by crystals and micro-crystalline materials, I, 304. Diffraction of X-rays at very small angles; application to the study of ultramicroscopic phenomena, I, 512.
- Guinochet, M. See Simonet, M.
- Guirau, J. B., effect of F.933 on the chronaxie and refractory period of the frog's heart, III, 1030.
- See also Morin, G.
- Guiraud, A. See Binet, L.
- Guiraud, J. See Riser, M.
- Guist, G., improvement of vision in damaged retina, III, 1042.
- Güter, H., preparation of alkali uranates, niobates, and vanadates in the dry way, I, 623.
- Gulbransen, E. A. See Nier, A. O.
- Guldborg, G. See Dybing, O.
- Gulezian, N. See Medes, G.
- Guli, M. F., glycolytic processes in trained muscles, III, 80. Glycolytic processes in fatigued muscles of animals fed diets containing large excess of acids or alkalis, III, 243.
- and Novikova, S. I., glycogen content of fatigued muscles of animals given "acid" and "basic" diets, III, 566.
- Gulland, J. M. See Cooke, G. W., and Falconer, R.
- Gullickson, T. W. See Wise, G. H.
- Gumeniuk, V. S. See Sinelnikov, K. D.
- Gummel, H., and Rarei, B., toxicology of 3:4-benzpyrene, III, 598.
- See also Rarei, B.
- Gunde, B. G., and Hilditch, T. P., seed and fruit coat fats of *Celastrus paniculatus*, III, 216. Seed fats of *Salvadora oleoides* and *S. persica*, III, 803.
- Gunderson, M. F. See Drummond, D. H.
- Gunderson, N. O., and Anderson, C. W., cleaning and sterilising Kahn or Wassermann tubes, III, 881.
- Gundert, E., aperture error of electrostatic tube lenses, I, 492.
- Gundy, G. V. See Raiford, L. C.
- Gunn, C. A. See Asmundson, V. S.
- Gunn, F. D. See Kepl, M.
- Gunn, J. A., actions of compounds related to adrenaline, III, 1052.
- Gurd, M. R., and Sachs, I., action of amines related to adrenaline: methoxyphenylisopropylamines, III, 711.
- Gunst, R. See Fichter, F.
- Gunter, M., and Mullinos, M. G., *in vitro* reaction of the iris to autonomic-mimetic drugs, III, 751.
- Guntermann, A., action of novocaine and urea on frog's motor nerve, III, 933.
- Gunther, C. E., and Tuft, L., comparison of media employed in isolation of typhoid bacilli from faeces and urines, III, 432.
- Gupta, J., origin of new low-frequency Raman lines in solids, I, 120.
- Gupta, K. D. See Das, S. R.
- Gupta, M. P., and Dutt, S., chemical examination of the seeds of *Cleome viscosa*, I, III, 342.
- Gurd, M. R. See Gunn, J. A.
- Gurdjian, E. S., Webster, J. E., and Sprunk, C. J., spinal fluid in injury to head; effects of drainage, isotonic fluids, morphine, and phenobarbital on cerebrospinal fluid pressure, III, 833.
- Gurevitch, L. E., problem of electron interaction in metals, I, 118.
- Gurevitch, I. I., phase transitions of nuclear matter, I, 595.
- and Rik, G. R., distribution of nuclear levels, I, 397.
- Gurevitch, V. G., and Sigalovskaja, K. K., density and pressure of vapour at low temperatures. II. Nitrobenzene, I, 603.

- Gurin, S., Bachman, C., and Wilson, D. W., nature of the carbohydrate in gonadotropic substance of pregnancy urine, III, 687. Gonadotropic hormone of pregnancy urine. I. Simple method of extraction and purification, III, 687.
- Gurmendi, G., genalkaloids; preparation and biological tests of genstrychnine, III, 716.
- and Guevara, J. de D., determination of methylene-blue, II, 294.
- Gurnee, W. S., hyperpyrexia produced by the hot box in combination with the Elliott treatment, III, 512.
- Gurney, R. W., and Mott, N. F., luminescence in solids, I, 122.
- See also Mott, N. F.
- Gurovitch, G. D. See Kurnakov, N. S.
- Gurry, R. W. See Owen, B. B.
- Gurvitsch, A., and Gurvitsch, L., ultra-violet chemiluminescence, I, 452. Polymerisation processes induced by mitogenetic radiation, I, 620. Explanation of mitogenetic radiation as "sensitised fluorescence," I, 620.
- See also Engel, F. L., and Gurvitsch, A.
- Guseva, V. See Evtuchova, M. L.
- Gusjeva, L. See Klarfeld, B.
- Guss, L. S. See Kolthoff, I. M.
- Gusseva, A. See Shmuk, A.
- Gustafson, E., intensity of the Stark effect components in hydrogen; theoretical calculation for stronger fields, I, 347.
- Gustafson, J. K., Kalgoorlie geology reinterpreted, I, 108.
- Gustavson, R. G. See Hays, E. E.
- Gutherlet, C. See Houghten, F. C.
- Guth, E., electro-disintegration of beryllium, I, 232.
- Guthe, T., and Nygaard, K. K., photoelectric determination (photograph) of ascorbic acid, III, 168.
- See also Nygaard, K. K.
- Guthkelch, A. N. See Folley, S. J.
- Guthrie, D., physiology of the vocal mechanism, III, 255.
- Guthrie, J. C. See Owen, E. A.
- Guthrie, K. J., and Montgomery, G. L., infections with *Bacterium enteritidis* in infancy with the triad of enteritis, cholecystitis, and meningitis, III, 1012.
- Guthrie, M. J., and Jeffers, K. R., ovaries of the bat *Myotis lucifugus lucifugus* after injection of hypophyseal extract, III, 585. Growth of follicles in ovaries of the bat *Myotis lucifugus lucifugus*, III, 585.
- Guthrie, N. W. See Bruger, M.
- Gutiria, V., action of sulphuric acid on olefines, II, 354.
- Gutman, A. B., and Gutman, E. B., "acid" phosphatase and functional activity of the prostate (man) and preputial glands (rat), III, 386. Adult phosphatase levels in prepubertal rhesus prostate tissue after testosterone propionate, III, 1057.
- Gutman, E. B. See Gutman, A. B.
- Gutman, J., action of dimethylamine on 1:2-dibromo-1-methylcyclohexane, II, 56. Action of dimethylamine on 3:4-dibromo-1-methylcyclohexane II, 150.
- Gutner, R., and Tschitschenko, D. V., aliphatic chloro-derivatives. XIII. Action of chlorine on *as*-methylthylethylene, II, 198.
- Gutsche, H., thermal measurements in liquid hydrogen, I, 310.
- Gutschmidt, J., specificity of Widmark test for blood-alcohol, III, 452.
- Gutierrez, M., and Santos, F. O., food consumption of 104 families in Paco district, Manila, III, 700.
- Guttman, R., electrical impedance of muscle during action of narcotics and other agents, III, 899.
- Guttman, L., reflex relations between viscera and sweat glands, III, 132.
- Gutton, C., and Carbenay, F., radiation measurements on short [Hertzian] waves, I, 490.
- Gutzeit, K., dietary treatment of cardiac and circulatory diseases, III, 1031.
- and Parade, G. W., blood-iodides. VII. Influence of exertion on blood-iodides in normal and thyrotoxic subjects. VIII. Influence of X-rays on blood-iodides [in thyrotoxicosis]. IX. Post-operative reaction after thyroidectomy, III, 476.
- Guy, J. B., and Smith, J. C., higher aliphatic compounds. VII. The binary systems, palmitamide-stearamide, palmitanilide-stearanilide, and methyl palmitate-stearate; purification of palmitic and stearic acid, II, 250.
- Guy, R. A., and Yeh, K. S., Peking diets. II. During minor illness, III, 1065.
- Guyenot, E., action of the auxogenic factor from pregnancy urine, III, 143.
- Guyer, M. F., and Claus, P. E., relative viscosities of tumour cells as determined by the ultra-centrifuge, III, 491.
- Guyer, W. R. F. See Ewing, W. W.
- Guzeli, L., determination of cobalthexacyanide, I, 536.
- Gverdtziteli, I. M. See Salkind, J. S.
- Gwan, O. S., immunity against *B. coli* by oral and rectal vaccination, III, 202.
- Gwathmey, J. T., role of preliminary medication in prevention of anaesthetic deaths, III, 412.
- Gwatkin, R., and Fallis, A. M., bactericidal and antigenic qualities of the washings of blowfly maggots, III, 879.
- Gwinner, E. See Fricke, R., and Glemser O.
- Gwynne, F. J. See Neil, J. H.
- Gye, W. E., biological aspect of the cancer problem, III, 69.
- and Foulds, L., production of sarcomata in hamsters by 3:4-benzpyrene, III, 491.
- Gysel, H., micro-gas-analytical determination of the nitrogen content of organic compounds, II, 566.
- Gysin, H. See Rupe, H.
- Gysin, M., presence of sodium-containing orthoclase in the syenitic rocks of Divrik (Turkey), I, 496.
- Gyulai, Z., electrical conductivity of coloured alkali halides, I, 453.
- Gyure, D., rhinovaccination and rhinovaccination, III, 1014.
- H.
- Haag, E., and Bolomey, P., relation between glutathione and the inhibiting action of iodoacetic acid on alcoholic fermentation, III, 520. Monoiodoacetic acid, glutathione, and glucose fermentation by Lebedev's maceration juice, III, 724.
- Haag, F. E., tuberculosis reaction of Haag and Niggemeyer, III, 334.
- and Schriek, W., skin extracts in anaphylactic shock; mutual influence of antigens, III, 619.
- Haag, J. R. See Wright, L. D.
- Haagen, E., and Krückeberg, B., tumour ascites of mice. III. Its transplantability, III, 280.
- and Seeger, G. P., tumour ascites of mice. IV. Influence of "cell vitality" and temperature on its transplantability, III, 280.
- Haagen-Smit, A. J. See Bonner, D. M., and English, J., *jun.*
- Haalck, H., molecular structure and compressibility of matter in the interior of the earth, and possible causes of permanent magnetism of the earth, I, 392.
- Haam, E. von. See D'Aunoy, R.
- Haapala, P., serpentes in northern Karelia, I, 107.
- Haarmann, W., dissociation equilibria of weak acids in urine and their uses in treatment of infection and lithiasis, III, 761.
- Haas, E., Horecker, B. L., and Hogness, T. R., enzymic reduction of cytochrome c; new enzyme, III, 1008.
- Haas, H. T. A., pharmacological actions on autonomic centres, III, 371. Action of drugs on acetylcholine content of central nervous system, III, 833. Ascorbic acid and fever, III, 852. Effects of drugs on vegetative centres, III, 860.
- Haas, P., Hill, T. G., and Russell-Wells, B., simple peptides occurring in marine algae, III, 216.
- Haas, R., endo- and exo-toxins of dysentery bacilli. III. Presence and properties of an endotoxin in dysentery bacilli (Kruse-Sonne), III, 429. Types of haemolytic streptococci of group A, III, 1103.
- Haas, W. See Kiewe, H.
- Haayman, P. W. See Merckel, J. H. C., and Wibaut, J. P.
- Habán, G., changes in the adrenals in experimental hyperthyroidism, III, 139.
- and Angyal, F., islands of Langerhans in experimental hyperthyroidism, III, 138.
- Habel, K., and Lucchesi, P. F., convulsions complicating pertussis, III, 1038.
- Haber, H. See Schuler, H.
- Haber, P., "centrifugal" dispersion of ultraviruses and their affinity for germinative cells, III, 335. Permeability of mouse vagina to ultravirus, III, 1014.
- Haberer, H. von. See Rehn, E.
- Haberland, G., attempted syntheses of natural sterols. III. Syntheses of tetracyclic ketones, II, 378.
- and Heinrich, E., attempted syntheses of natural sterols. IV. Extension of the Reformatsky synthesis, II, 378.
- Kleinert, G., and Siegert, H. J., preparation of amines from partly hydrogenated phenanthrols, II, 73.
- and Siegert, H. J., synthesis of 4-keto-6:10-dimethoxy-1:2:3:4-tetrahydrophenanthrene, II, 74.
- Haberland, H. F. O., changes in gastric contents on keeping, III, 62. Emptying mechanism of the gall bladder, III, 69?
- Haberlandt, H., and Kohler, A., blue fluorescence of natural silicates in the ultra-violet, and experiments with synthetic silicate melts containing bivalent europium, I, 436.
- Haberman, S. See Kemp, H. A.
- Haberstroh, A. See Valentiner, S.
- Habild, G., bacterial destruction of 3:5-di-iodo-L-tyrosine, III, 874.

- Habs, H., and Bader, R. E., chemotherapeutic experiments with prontosil on experimental streptococcal infections of guinea-pigs, III, 610.
- Hac, L. R., Flynn, C. S., and Perry, C. A., evaluation of H and O antigens in agglutination tests for typhoid fever, III, 528.
- See also Adair, F. L.
- Hachey, H. B., cold water layer of the Scotian shelf, I, 46.
- Hackel, J., thermal analysis of binary systems containing glyceryl trinitrate, III, 1, 264.
- Hacker, S. G., multiplet calibration of the Arcturus spectrum, I, 2.
- Hackett, W. See Austen, A. E. W., and Whitehead, S.
- Hackl, O., determination of fluorine in silicate rocks, I, 276.
- Hackmann, C., acquired resistance of individual organs to Brown-Pearce carcinoma of rabbits, III, 280.
- Hackspill, L., and Borocco, A., preparation of alkali deuterides and comparison of their dissociation pressures with those of the corresponding hydrides, I, 154.
- Hacman, D., optical properties of very thin layers of potassium, I, 459.
- Hadáček, J., and Rosenberg, Z., properties of saponins, especially of cyclamin, III, 218.
- Hadbury, D. See Foss, N. E.
- Haddenbrok, S., convulsive treatment of schizophrenia with azoman [triazole], III, 572.
- Haddow, A., biological characters of spontaneous tumours of the mouse, with special reference to rate of growth, III, 158. Influence of carcinogenic substances on sarcomata induced by the same or other compounds, III, 159. Influence of carcinogenic compounds and related substances on the rate of growth of spontaneous tumours in the mouse, III, 159. Cellular inhibition and origin of cancer, III, 396.
- and Robinson, (Mrs.) A. M., association of carcinogenicity and growth-inhibitory power in the polycyclic hydrocarbons and other substances, III, 697.
- Haden, R. L., red cell mass in polycythemia in relation to diagnosis and treatment, III, 227. Diagnostic significance of changes in the red cells, III, 741.
- Hadidian, Z. See Himwich, H. E.
- Hadjopoulos, L. G. See Caspe, S.
- Hadley, F. P. See Jay, P.
- Hadorn, W., insulin and the circulation, III, 141.
- and Walthard, B., changes in heart muscle in insulin shock, III, 895.
- Habisch, H. See Zaepfer, G.
- Haefer, R., connexion between field electron emission and emission work, I, 113.
- Hagele, G., and Machatschki, F., britholith—a cerium silicate apatite, I, 284.
- Haggqvist, G., double cerebrospinal innervation of striated muscle, III, 29. Tonic innervation of skeletal muscle, III, 465.
- Haempel, O. See Glaser, E.
- Haendler, H. M., testing of organic reagents for inorganic analysis, I, 335.
- [with Smith, George McPhail], o-quinone-mono-oxime inner complexes, II, 555.
- and Geyer, B. P., classification of chelating groups, II, 1.
- Haenny, C., and Haissinsky, M., preparation of sources of Po-Be neutrons, I, 623.
- and Rosenberg, A., emission of neutrons during artificial disintegration of uranium nuclei; possibility of chain reaction, I, 293.
- Hantzschel, K., paroxysmal haemoglobinuria, III, 1025.
- Haertig, E. W. See Masserman, J. H.
- Haertl, E. J. See Jeffery, E. C.
- Hausler, H., detoxication of digitalis, III, 182.
- Heeven, H. van der, treatment of toxæmias of pregnancy by corpus luteum hormone, III, 58.
- Haffner, J., progestin content of mature and early human placenta, III, 587.
- Haffter, C. See Jezler, A.
- Hafkesbring, R., Greisheimer, E., and Magalhaes, H., effects of repeated anaesthetic doses of barbiturates. I. Nembutal, III, 714.
- Hafstad, L. R., and Teller, E., α -particle model of the nucleus, I, 6.
- See also Roberts, R. B., and Rumbaugh, L. H.
- Hagebusch, O. E. See Foshay, L.
- Hagedoorn, A., and Keers, W., skull index and skull capacity, III, 112.
- Hagedorn, H. C., protamine-splitting properties of serum, III, 12.
- Hagen, J., vitamin-C metabolism and chronic benzene poisoning, III, 416.
- Hagen, P. S., effects of digilanid-C in varying dosage on the potassium and water content of rabbit heart muscle, III, 1085.
- Hagen, S. K., iodometric determination of copper in nitric acid solution, I, 430.
- Hagenbach, A., rotatory [magnetic] dispersion of deuterium oxide in the ultraviolet, I, 182.
- Hagenguth, K., simple rapid dialyser, I, 161.
- Hagenmeyer, H. O. See Scheurer, O.
- Hagens, E. See Dam, H.
- Hager, F., clinical experiences with albucid, III, 1083.
- Hager, J. See Lindner, J.
- Haggard, H. W., and Greenberg, L. A., absorption, distribution, and elimination of alcohol. IV. Elimination of methyl alcohol, III, 933.
- Greenberg, L. A., and Cohen, L. H., quantitative differences in the effects of alcoholic beverages, III, 412.
- Strauss, M. J., and Greenberg, L. A., fungous infections of hands and feet treated by iontophoresis of copper, III, 865.
- Haggart, G. E. See Bartels, E. C.
- Hagiesco, D., Bazavan, G., Criscota, M., and Cioranescu, M., treatment of bronchial asthma with ascorbic acid, III, 25.
- Hagisawa, H., measurement of p_H by means of glass electrode and hydrolysis of copper sulphate, I, 321. Hydrolysis of zinc sulphate and formation of basic sulphate, I, 371. Dissociation constants of selenic acid, I, 565.
- Hagner, A. F., adsorptive clays of the Texas Gulf Coast, I, 345.
- Hagopian, F. See Bagg, H. J.
- Hagquist, C. W., cellular changes in the anterior hypophysis during the reproductive cycle in the female guinea-pig, III, 576.
- See also Young, W. C.
- Hahn, A., Gerstenberger, H., and Isensee, I., carbohydrate metabolism in minced liver, III, 484.
- Gerstenberger, H., and Mehler, E., preparation of cozymase, III, 788.
- Hahn, F., sensitivity to digitalis and increase of blood-calcium, III, 183. Cumulation of digitalis and performance of heart after treatment with small doses of digitoxin, III, 931. Strophanthin sensitivity and blood-calcium, III, 1002.
- Hahn, G., bee poison, III, 415.
- and Fernholz, M. E., bee poison. V. Simple, chemical separation of the two toxic components, III, 696.
- and Gudjons, H. F., [synthesis of 1-alkyl-isoquinolines and polymethylenedi-1:1'-isoquinolines], II, 36.
- and Schulz, H. J., synthesis of alkoxy-phenylacetic acids, II, 368. [Synthesis in] the series of hydroxy- and alkoxy-oxindoles, II, 387.
- Stiehl, K., and Schulz, H. J., transformation of substituted acetylmandelonitriles into α -halogenated phenylacetamides, II, 368.
- Hahn, H. See Borsche, W., and Juza, R.
- Hahn, L., and Langendorf, R., auricular electrocardiogram, III, 1030.
- Hahn, L. A., Hevesy, G. C., and Rebbe, O. K., exchange of potassium ions inside muscle cells and blood-corpuscles with those in plasma, III, 1079.
- Hahn, O., and Strassmann, F., production of radium isotopes from uranium by irradiation with rapid and slow neutrons, I, 5. Detection and behaviour of the alkaline-earth metals produced by irradiation of uranium by neutrons, I, 116. Detection of the production of active barium isotopes from uranium and thorium by irradiation with neutrons; detection of further active products by the disintegration of uranium, I, 174. Products of disruption of uranium, I, 235. Existence of trans-uranium elements. I. Non-existence of cka-platinum and cka-iridium, I, 398. Further disintegration products of the bombardment of uranium with neutrons, I, 443.
- Strassmann, F., and Flugge, S., products of disintegration of thorium, I, 504.
- See also Aston, F. W.
- Hahn, P. F., Bale, W. F., Lawrence, E. O., and Whipple, G. H., radioactive iron and its metabolism in anaemia, III, 228.
- and Whipple, G. H., haemoglobin production in anaemia limited by low protein intake, III, 447.
- Hahn, V. See Prelog, V.
- Haig, C., and Lewis, J. M., simple method of measuring brightness threshold of dark adapted eye at all ages, III, 904.
- See also Patek, A. J., jun.
- Hailer, E., action of bactericidal substances on human and bovine tubercle bacilli. II. Action of inorganic acids and acids of the aliphatic series. III. Alcohols and phenols, III, 632, 795.
- Haimovici, H. See Cornil, L.
- Hain, A. M., effect of triphenylethylene on capons, III, 55. Physiology of pregnancy in the rat: passage of hormones via placenta and the mother's milk, III, 143. Oestrogenic and androgenic substances in pregnancy, III, 382. Effect of temperature on response of bantam capons to androsterone, III, 687.

- Hain, A. M., combatrophy after adult castration (bantam cocks), III, 688.
- and Robertson, E. M., pregnanediol excretion in the menstrual cycle, III, 913. Determination of luteal activity and early diagnosis of pregnancy, III, 913.
- Haines, R. W., revision of extensor muscles of the fore-arm in tetrapods, III, 345.
- Haines, S. F. See Eaton, L. M.
- Hair, G. W., nerve supply of the hypophysis of the cat, III, 257.
- Haisinski, B. E. See Sharnowski, A. M.
- Haissinsky, M., Rosenblum, S., and Walen, R. J., non-existence of electrons of multiple mass in the β emission of radium-E, I, 545.
- and Saniélevici, A., electrolytic formation of bismuth peroxide, I, 329.
- and Walen, R. J., detonation of nitrogen iodide under the action of α -rays from polonium, I, 482.
- See also Haenny, C., and Walen, R. J.
- Hajna, A. A., decomposition of sodium mucate by *Aerobacter cloacae*, III, 1011.
- Haker, W. See Jantzen, E.
- Haklin, E., and Gregersen, M. I., effect of adronaline, nembutal, and sympathectomy on plasma volume of cat, III, 815.
- Halasz, A., phenylpropoxyethyl alcohol, II, 475.
- See also Palfray, L.
- Halász, A. von, action of pears on diuresis and blood pressure, III, 310.
- Halban, H. von, use of the hydrogen lamp in absorption spectroscopy, I, 580.
- Kowarski, L., and Magat, M., intensity of neutrons in cosmic radiation, I, 236.
- Halban, H. von, jun., Joliot, F., and Kowarski, L., liberation of neutrons in the nuclear explosion of uranium, I, 233, 398. Energy of neutrons liberated in the nuclear fission of uranium induced by thermal neutrons, I, 444.
- Kowarski, L., and Savitch, P., simple capture of thermal and resonance neutrons by uranium, I, 350.
- See also Adler, F.
- Halberstadt, S., porosity of Chamberland filter candles, III, 880.
- Halberstaedter, L., and Doljanski, L., transformation *in vitro* of cultures of normal cells treated with Rous sarcoma agent into sarcoma cultures, III, 490.
- Halbertsma, T., and Hartog, H. A. P., auricular flutter in young infant with recovery on digitalis therapy, III, 965.
- Halbrecht, J., transfusion with placental blood, III, 230.
- Hald, J. See Bandier, E., and Jacobsen, E.
- Hald, P. M., importance of removing phosphorus in the determination of serum-sodium, III, 1114.
- Haldane, J. B. S., congenital diseases, III, 643.
- and Philip, U., daughters and sisters of hæmophiles, III, 1023.
- See also Alexander, W.
- Haldane, J. S., Haynes, F., Shaw, A., and Graham, J. I., silicosis and its prevention, III, 782.
- Halder, M. K. See Basu, K. P.
- Halden, W., vitamin-E; lipins; fundamental biological law, III, 404. Fat-soluble vitamins. III. Sterols (steroids), vitamin-D, -E, -F, and -K, III, 705.
- Haldi, J., Bachmann, G., Ensor, C., and Wynn, W., comparative effects of a high-glucose and a high-fructose diet on activity, body-weight, and various constituents of the liver and body of albino rats exercising at will, III, 71.
- See also Bachmann, G.
- Hale, D. H., Townsend coefficients for ionisation by collision in pure and contaminated hydrogen as a function of the cathode material, I, 348.
- Hale, H. B. See Patterson, C. A.
- Hale, J. B. See Adams, R., and Bailey, C. R.
- Halford, R. S. See Segrè, E.
- Hall, (Sir) Arthur, the latter half of the life of an epileptic, III, 671.
- Hall, B. E., influence of sulphanilamide on blood, III, 610.
- See also Heck, F. J.
- Hall, C. C., and Cawley, C. M., hydrogenation-cracking of diphenylene oxide and related compounds, II, 146.
- Hall, D. A. See Friend, J. N.
- Hall, E. M., and Morgan, W. A., progressive alcoholic cirrhosis, III, 594.
- Hall, F. See Hench, P. S.
- Hall, G., Kellett, C. E., and Stephenson, G. E., Cushing's syndrome, III, 576.
- Hall, G. E., experimental heart disease, III, 360.
- and Cleghorn, R. A., cardiac lesions in adrenal insufficiency, III, 139.
- See also Banting, F. G., Goodwin, J. E., Leibel, B., and Loughheed, D. W.
- Hall, H. See Novak, M.
- Hall, H. R., automatic pH controls, I, 104.
- Hall, J. L. See Carter, R. O.
- Hall, J. M. See Roe, J. H.
- Hall, J. S., comparison of velocity of visual and infra-red light by an astronomical method, I, 548.
- Hall, K. See Korenchevsky, V.
- Hall, M. See Sheldon, W.
- Hall, N., formula and analysis of the cadmium cyanide complex, I, 622.
- and Hogaboom, G. B., jun., measurement and control of pH , I, 581.
- Hall, R. P., nitrogen requirements of *Euglena anabæna*, var. *minor*, III, 942.
- and Loefer, J. B., supposed utilisation of inorganic nitrogen by the colourless cryptomonad flagellate, *Chlomonas paramecium*, III, 201.
- and Schoenborn, H. W., autotrophic nutrition in *Chlorogonium euchlorum*, *Euglena anabæna*, and *E. deses*, III, 201.
- Hall, S. R. See Butz, L. W.
- Hall, W. H., simple hydrogen electrode outfit, I, 280. Alkalimeter, I, 582.
- Hall, W. K. See Schenken, J. R.
- Halla, F., X-ray structural analysis: its bases and application to the system Fe-Zn, I, 251.
- and Montignie, E., system Mn-Bi, I, 194.
- and Weil, R., space lattice of aluminium boride, AlB_{12} , I, 185.
- Weil, R., and Gotzl, F., space lattice of the ζ -phase in the iron-zinc system, I, 251. System iron-zinc. II, I, 313.
- Hallam, R., reaction following M. & B. 693 and exposure to ultra-violet light, III, 503.
- Hallen-Faulsen, L., effect of light on determination of alcohol in blood by Widmark's method, III, 962.
- Haller, H. L., and La Forge, F. B., constituents of pyrethrum flowers. XIV. Structures of the enols of pyrethrolone, II, 171.
- and Schaffer, P. S., action of magnesium isobutyl bromide on 3:4:5-trimethoxybenzonitrile, II, 508.
- See also Goodhue, L. D., Schechter, M. S., and Smith, L. E.
- Haller, J., water-jet blower, I, 105.
- Haller, R. B., and Selwood, P. W., residual paramagnetism in compounds of lanthanum, I, 132.
- Halliburton, W. D., and McDowall, R. J. S., handbook of physiology and biochemistry, III, 1114.
- Halliday, N., fatty livers in vitamin-B₆-deficient rats, III, 75. Effect of formalin fixation on liver-lipins, III, 843.
- Hallimond, A. F., beryl from Beam mine, Cornwall, I, 392.
- Hallinan, F. J., and Thompson, W. R., thiosulphate titration of chlorine, I, 213.
- Hallman, N., formation of citric acid in heart muscle, III, 744.
- Hallock, P., lactic acid production at rest and after exercise in heart disease, III, 821.
- Hallon, D., use of a new product in dental practice, III, 278.
- Halma, F. F. See Biale, J. B.
- Halmöy, E., and Hassel, O., molecular structure of 1:2:4:5-tetrabromocyclohexane (m.p. 185°), I, 458.
- Halpern, B. N., effect of histidine hydrochloride on smooth muscle, III, 1002.
- and Dubost, P., methæmoglobin, III, 814.
- Durel, P., Dubost, P., and Allinne, M., absorption and elimination of 2-(*p*-aminobenzenesulphonamido)pyridine (T. 693) in animals and in man, III, 858.
- Halpern, J., and Crane, H. R., pair internal conversion coefficient in the $F+H'$ reaction and measurements on the γ -ray spectrum, I, 171. Absorption coefficient of 5.8-Me.v. γ -radiation in aluminium, I, 171. γ -Rays from B+D, I, 231.
- See also Crane, H. R., and Oleson, N. L.
- Halpern, L., pathological correlations on motor system of eye, III, 830.
- See also Getzowa, S.
- Halpern, O., and Doermann, F. W., new proof of the H theorem, I, 406.
- and Johnson, M. H., magnetic scattering of neutrons, I, 397.
- Lueneburg, R., and Clark, O., diffuse reflexion of neutrons from a plane surface, I, 53.
- Halpert, B., rate of flow of bile in the rabbit, III, 63.
- and Stanney, J., erythroblasts in the chorionic blood vessels of human embryos, III, 5.
- Halphen, Martin, René, and Bignotti, action of sulphanilamide in streptococcal meningitis, III, 610.
- Halpin, J. G. See Deobald, H. J., and Wiese, A. C.
- Halter, C. R., wheat-germ oil and tumour formation, III, 989.
- Halvorsen, R. A. See Kolthoff, I. M.
- Halvorson, H. A. See Lachat, L. L.
- Ham, A. J. See Garner, W. E.
- Ham, T. H., and Curtis, F. C., sedimentation rate of erythrocytes, III, 448. Plasma-fibrinogen response in man, III, 450.
- Ham, W. R. See Rast, W. L.

- Hamaker, H. C. [with Valk, J. H. van der], adsorption of iodine vapour by powders, I, 519.
See also De Boer, J. H.
- Hamanaka, S., genesis of gall-stones; administration of excess of irradiated ergosterol to rabbits, III, 273.
- Hamann, E. E., and Huddleson, I. F., effect of sulphanilamide on *Brucella abortus* infection in two cows, III, 710.
- Hamano, R. See Kasahara, S.
- Hamazaki, Y., acid-fast granules of different tumour tissues. II. Malignant tissues, III, 69.
- Hamblen, E. C., therapeutic use of sex sterols in functional meno-metrorrhagia, III, 268. Menstrual disorders associated with increased pregnadiol excretion, III, 585. Clinical evaluation of ovarian responses to gonadotropic therapy, III, 755.
- Ashley, C., and Baptist, M., sodium pregnadiol glucuronide: the significance of its excretion in the urine, III, 265.
- Cuyler, W. K., Powell, N. B., Ashley, C., and Baptist, M., metabolism and utilisation of crystalline progesterone, III, 1056.
- Hambleton, A. See Crombie, D. W.
- Hamblin, D. O., and Mangelsdorff, A. F., methämoglobinemia and its measurement, III, 9.
- Hamburger, C., assay of gonadotropic hormones. III. Comparison between rat and rabbit dose-response curves for crude and purified preparations of human pregnancy urine- and mare serum-hormone, III, 384.
- Hamburger, W. W., earliest known references to heart and circulation, III, 819.
- Hamburgher, L., supersaturated solutions, particularly of calcium salts, I, 69.
- Hamer, (Miss) F. M., preparation of 4'-cyanines, II, 395.
See also Beilenson, B.
- Hamer, W. J. See Scatchard, G.
- Hamil, B. M., Reynolds, L., Poole, M. W., and Macy, I. G., minimal vitamin-C requirements of artificially fed infants, III, 1071.
See also Munday, B.
- Hamilton, B. See Highman, W. J., jun.
- Hamilton, B. E. See Thomson, K. J.
- Hamilton, C. S. See Banks, C. K., Beguin, A. E., and Holcomb, W. F.
- Hamilton, D. R., atomic beam study of the hyperfine structure of the metastable $^2P_{3/2}$ state of ^{115}In . I. Electric quadrupole moment of ^{115}In , I, 503.
- Hamilton, E. H. See Hubbard, D.
- Hamilton, H. L., action of acetylcholine, atropine, and nicotine on the heart of the grasshopper, III, 359.
- Hamilton, J. B., effect of male hormone on descent of the testes, III, 52. Significance of sex hormones in tanning of the skin in women, III, 981.
and Dorfman, R. I., influence of vehicle on length and strength of action of testosterone propionate, III, 687.
and Hubert, G., effect of synthetic male hormone substance on descent of testicles in human cryptorchidism, III, 52. Photographic nature of tanning of the human skin as shown by studies of male hormone therapy. III, 266.
- Hamilton, J. B., and Leonard, S. L., effect of male hormone substance on the testes and on spermatogenesis, III, 267.
and Wolfe, J. M., effect of male hormone on birth and prenatal development in the rat, III, 53.
See also Boling, J. L., and Dorfman, R. I.
- Hamilton, J. D. See Duff, G. L.
- Hamilton, J. E., crystal structure of sodium bromate, I, 130.
- Hamilton, J. G., rates of absorption of radioactive isotopes of sodium, potassium, chlorine, bromine, and iodine in normal human subjects, III, 408.
and Alles, G. A., physiological action of natural and artificial radioactivity, III, 867.
- Hamilton, J. W. See Keller, A. D., and Kuntz, A.
- Hamilton, M. A. See Laidlaw, R. W.
- Hamilton, P. M., and Platen, E. S., sulphanilamide, III, 81.
and Togasaki, Y., [serum and sulphanilamide in] prophylaxis of complications of scarlet fever, III, 859.
- Hamilton, R. C., comparison of chemical analyses of blood obtained post-mortem with degrees of renal damage, III, 274.
- Hamilton, R. H., technical procedures in blood chemistry for the small hospital laboratory, III, 117.
- Hamilton, W. F., and Dow, P., experimental study of standing waves in pulse propagated through the aorta, III, 823.
- Woodbury, R. A., and Vogt, E., differential pressures in lesser circulation of the unanesthetised dog, III, 457.
See also Dow, P.
- Hamkinson, L. F., menopausal syndrome, III, 59.
- Hamlyn, W. T. See Gaudin, A. M.
- Hammann, G. See Lueg, W.
- Hammar, G. W., and Martin, Gordon, friction, I, 599.
- Hammar, J. A., role of the thymus in immunisation, III, 680.
- Hammarsten, E. See Agren, G.
- Hammarsten, G., dietetic therapy of calcium oxalate calculi in urinary passages, III, 66.
- Hammel, F., sulphates of the magnesium series, I, 305.
- Hammen, J. P. van der, dispersion of conductivity of multivalent electrolytes in aqueous solution, I, 28.
- Hammer, H. J., and Schulte, T. L., changes in blood pressure produced by prostatic massage, III, 21.
- Hammerschmidt, J., mechanism of diphtheria immunity, III, 875.
- Hammersland, H. L., Herrin, H. S., and Haynes, C. F., blood in horses infected with infectious anemia, III, 351.
See also Butler, W. J.
- Hammett, F. S., comparison of *D*-alanine, *L*-phenylalanine, and *L*-tyrosine with respect to their participation in developmental growth, III, 296. Differentiation-forwarding action of *D*-glutamic acid, III, 296. Regeneration-favouring activity of glycine, III, 341.
and Chapman, S. S., quantitative unreliability of the nitroprusside test for $\cdot\text{SH}$ and $\cdot\text{S}\cdot\text{S}\cdot$, III, 344.
- Hammett, L. P., effect of structure on the reactions of organic compounds; temperature and solvent influences, I, 82.
See also Zucker, L.
- Hammick, D. L., Hutson, J. M., and Jenkins, G. I., photochemical addition of bromine to bromobenzene in carbon tetrachloride solution, I, 89.
- Norris, A., and Sutton, L. E., use of dielectric polarisations in investigation of formation of intermolecular complexes in solution, I, 25.
- Reynolds, E. H., and Sixsmith, G., complex formation between polynitro-compounds and aromatic hydrocarbons and bases. VII. A further resolution of 4:6:4'-trinitrodiphenic acid, II, 114.
and Sixsmith, G., complex formation between polynitro-compounds and aromatic hydrocarbons and bases. VIII. Interaction and colour in systems containing methyl 4:6:4'-tetranitrodiphenate and various hydrocarbons, II, 370.
See also Ashworth, M. R. F., and Dyson, P.
- Hammond, P. D. See Dougherty, G.
- Hammouda, M., and Wilson, W. H., reflex acceleration of respiration from excitation of vagus or its terminations in lungs, III, 366.
- Hamner, K. C., histological responses of *Mirabilis jalapa* to indolylacetic acid, III, 214.
- Hamon, M., chemical constituents of the envelopes of Cephalopod spermatophores, III, 590. Identification of α -amino-acids in the spermatophores of Cephalopods, III, 757. Presence of α -amino-acids in spermatophores of *Pagurus*, III, 984.
See also Rose, M.
- Hamon, V. See Bovet, D., Rist, N., and Tréfoüel, J.
- Hámori, A. See Mansfeld, G.
- Hamperl, H., morphology of action of carcinogenic substances, III, 70.
See also Brock, N., and Druckrey, H.
- Hampson, G. C., and Pauling, L., structure of ammonium heptafluozirconate and potassium heptafluozirconate and the configuration of the heptafluozirconate ion, I, 12.
See also Ingham, C. E.
- Hampton, B. L. See Hasselstrom, T.
- Hamre, C. J., and Miller, C. O., nutritional anemia of the rat. I, III, 647.
- Hamsa, W. R., and Bennett, A. E., traumatic complications of convulsive shock therapy, III, 832.
- Hanai, S., benzylation of *D*-sorbitol and *meso*-erythritol, II, 240. Condensation product of methyl α -aldehydobenzoate and malonic acid, II, 265. Condensation products of anisic acid esters, formaldehyde, and hydrochloric acid in presence of zinc chloride, II, 370.
See also Yoshikawa, K.
- Hanasek, J., experimental basis of trans-fusion of leucocytes, III, 812.
- Hanbury, D. R. See Palmer, G. W.
- Hancock, (Miss) E. M. See Cope, A. C.
- Hand, D. B., determination of riboflavin in milk, III, 766.
- Handel, J. van den. See Becquerel, J.
- Handler, B. J. See Gross, H.
- Handler, P. See Carter, H. E., and Smith, A. K.
- Handley, W. R. C. See Evans, W. C.
- Handovsky, H., and Daels, J., paradoxical effect of ergometrine on uterus of cat *in situ*, III, 1003.
and Hauss, L., the γ_{H} of hormones, III, 473.
See also Goormaghtigh, N.

- Hands, S., and Peat, S.**, isolation of an anhydro-*l*-galactose derivative from agar, II, 50.
- Haneda, Y.**, light fish, *Malococephalus levis* (Lowe), III, 488.
- Hanemann, H., and Schrader, A.**, ternary aluminium systems. I. Aluminium-iron-magnesium, aluminium-magnesium-manganese, aluminium-manganese-silicon. II. Aluminium-iron-manganese and aluminium-copper-manganese, I, 70, 560.
- See also **Barnick, M.**, and **Jass, H.**
- Hanes, F. M.**, hyperparathyroidism, with death from parathormone intoxication, III, 579.
- Hanes, W. J., and Crew, R. S.**, endocrinologic and metabolic observations in exfoliative dermatitis, III, 498.
- Hanger, F. M.**, serological differentiation of obstructive from hepatogenous jaundice by flocculation of cephalin-cholesterol emulsions, III, 692.
- Hanke, H.**, hormones and surgery, III, 135.
- Hanke, M. E.** See **Blauch, M. B.**
- Hanke, M. T.**, nutrition and dentition, III, 282.
- Hanks, J. H.** See **Evans, B.**
- Hanle, W.** See **Maercks, O.**
- Hann, R. M., and Hudson, C. S.**, structure and configuration of perseulose (*L*-galaheptulose), II, 143.
- Maclay, W. D., and Hudson, C. S.**, aldehydo-derivatives of *D*-aa-galactose (*D*-gala-*L*-galactose), II, 300. Structure of the diisopropylidene-dulcitol, II, 492.
- Maclay, W. D., Knauf, A. E., and Hudson, C. S.**, relations between rotatory power and structure in the sugar group. XXXI. Configuration of *D*-aa-mannoctose (*D*-manno-*L*-manno-*o*-octose), II, 300.
- See also **Maclay, W. D.**, and **Richtmyer, N. K.**
- Hanna, G.** See **Alport, A. C.**
- Hannah, R. H., and Hobson, F. G.**, meningococcal meningitis treated with proseptasine and soluseptasine, III, 81.
- Hanneborg, S.** See **Föyn, E.**
- Hano, J.**, pharmacological action of vitamin-*B*₁, III, 286.
- See also **Supniewski, J. V.**
- Hanrez, P.** See **Pinkus, A.**
- Hans, M., and Tabencka, Z.**, blood vessels of the skin of *Myxine glutinosa*, L., III, 19.
- Hansel, F. K.**, allergy as related to otolaryngology and ophthalmology, III, 619.
- Hansen, A.**, adsorption of diphtheria antitoxin by aluminium hydroxide, III, 202. Action of pepsin and hydrochloric acid on diphtheria antitoxin, III, 202. Purification and concentration of diphtheria antitoxin by adsorption after autolysis with pepsin, III, 330.
- Hansen, A. B.**, experimental agranulocytosis in rabbits, III, 549.
- Hansen, A. E.**, nature of fatty acids of acetone-insoluble (phospholipin) fraction of serum, III, 962.
- See also **Brown, W. R.**
- Hansen, C. H.** See **Sachs, A.**
- Hansen, C. J.**, polythionates. V. Action of arsenic and antimony compounds in formation of polythionates from thio-sulphate, I, 211.
- Hansen, E.** See **Christensen, B. E.**
- Hansen, E. H.**, andrin (male hormone) in human urine of male castrates, III, 142.
- Hansen, F.**, tryptase treatment of feverish cholangitis, III, 83.
- Hansen, H.**, absorption of monochromatic Röntgen rays in liquid and gaseous carbon disulphide, methylene chloride, and ethyl bromide, and in gaseous methyl iodide between 0-1623 and 1-933 Å., I, 441.
- Hansen, K.**, action of thymol as antigen, III, 417.
- and **Dybing, O.**, narcotic action of deuterolcohol, III, 511. Micro-determination of [dipenta]deuterethyl ether, III, 804. Comparison of narcotic action of deuterethyl ether and ethyl ether, III, 934.
- and **Wuelfert, K.**, action of heavy water on growth of young animals, III, 934.
- See also **Dybing, O.**
- Hansen, K. M.**, possible influence of magnetism on man, III, 420.
- Hansen, L.**, sulphanilamide concentration and distribution in blood and urine in sulphanilamide therapy for gonococcal infections in men, III, 710.
- and **Wuelfert, K.**, apparatus for producing drops of exactly equal size, I, 282.
- Hansen, O.** See **Christensen, E. H.**
- Hansen, P. A.**, respiration of rod-shaped lactic acid bacteria, III, 524.
- Hansen, R.**, collapse during labour, III, 756.
- Hansen-Pruss, O. C.**, urticaria of bacterial origin, III, 93.
- Hanson, F. R.** See **Meakins, J. C.**
- Hanson, H.** See **Abderhalden, E.**
- Hanson, W. E.** See **Taylor, H. A.**
- Hanstein, H. B.** See **Anderson, H. L.**
- Hanus, F., and Fuchs, E.** [with **Ziegler, F.**], hardening process of phenol-formaldehyde resins. II., II, 476.
- See also **Zinke, A.**
- Hanut, C. J.**, use of dilute venom of *Bothrops atrox* as haemostatic, III, 10. Use of "plasmas of venoms" of *Bothrops* for study of first phase of coagulation in vitro, III, 117. Effect of noxious agents on blood-coagulation action of snake venoms, III, 231. Effect of venoms of *Crotalus terrificus* and of different species of *Bothrops* on blood coagulation in vitro, III, 353. Use of *Bothrops atrox* venom as a haemostatic, III, 451. Action of snake venom on blood coagulation, III, 616.
- Hanzlik, P. J., Lehman, A. J., Van Winkle, W., jun., and Kennedy, N. K.**, general metabolic and glycogenic actions of propylene glycol and other glycols, III, 998.
- Newman, H. W., Van Winkle, W., jun., Lehman, A. J., and Kennedy, N. K.**, toxicity, fate, and excretion of propylene glycol and other glycols, III, 1090.
- Happold, F. C.** See **Evans, W. C.**
- Hara, R.** See **Toriumi, T.**
- Hara, T.**, effect of protein-fat diets on synthesis of hippuric acid, III, 1077.
- Harada,** organo-metallic compounds. IV. Tin alkyl compounds and their derivatives, II, 251.
- Haralambie, J. Q.** See **Bigler, J. A.**
- Haraldsen, H.**, affinity. LXXXVII. Phosphides of copper, I, 264. Transitions of ferrous sulphide, I, 360.
- and **Mehmed, F.**, magneto-chemical studies. XXX. Phase relationships and magnetic behaviour in the system chromium-selenium, I, 27.
- Harbard, E. H.** See **Bhatnagar, S. S.**, and **Cameron, A.**
- Harcourt, G. A.** See **Berman, H.**
- Hardegger, E.** See **Ruzicka, L.**
- Harding, J. P.**, simple instrument for dissecting minute organisms, III, 734.
- See also **Graham, M.**
- Hardy, J. D., and Milhorat, A. T.**, basal heat loss and production in women at temperatures from 23° to 36°, III, 1076.
- Milhorat, A. T., and Du Bois, E. F.** [with **Soderstrom, G. F.**], effect of exercise and chills on heat loss from the nude body, III, 295.
- and **Oppel, T. W.**, temperature sensation. IV. Stimulation of cold sensation by radiation, III, 29.
- and **Soderstrom, G. F.**, heat loss from the nude body and peripheral blood flow at temperatures of 22-35°, III, 295.
- See also **Civin, H.**
- Hare, R.**, effect of passive immunisation on experimental virus influenza in mice, III, 1014.
- See also **Farr, L. E.**
- Hargreaves, R.**, vapour pressure of zinc in brasses, I, 314.
- Haring, M. M., Hatfield, M. R., and Zapponi, P. P.**, amalgam activities and standard electrode potentials. II. Lead, I, 266.
- Harington, C. R., and Moggridge, R. C. G.**, α-amino-β-(4-methylthiazole-5)-propionic acid, a possible precursor of aneurin, II, 231.
- and **Pitt-Rivers, R. V.**, preparation of thyroxine from casein treated with iodine, II, 526.
- Harispe, J. V.**, colorimetric semi-micro-determination of arsenic in urine in massive novarsenic treatment, III, 844.
- Harkins, W. D., and Boyd, G. E.**, viscosity of two-dimensional systems; effect of pressure and temperature, and detection of phase transitions in monolayers, I, 255.
- and **Florence, R. T.**, molecular interaction in mixed monolayers on aqueous subsolutions. I. Mixtures of alcohols, acids, and amines, I, 73.
- and **Mattoon, R. W.**, effect of hydroxyl-ion concentration (or of *pH*) on film potential of multilayers, I, 196. Film potentials of stearate multilayers and other dielectrics on metal surfaces, I, 256.
- and **Nutting, G. C.**, energy relations in transformations from three- to two-dimensional systems. I. Latent heat and entropy of spreading of myristic and pentadecic acids, I, 467.
- See also **Aston, F. W., Boyd, Edward, Florence, R. T., Groetzinger, G., and Nutting, G. C.**
- Harkness, H. W.**, Rideal absorption hygrometer, I, 539.
- Harland, J. C., and Robertson, A.**, picrotoxin. III., II, 385.
- See also **O'Donnell, R. W. H.**
- Harlay, and Malangeau**, fluorometric determination of urinary porphyrins, III, 1060.
- Harley, J. H. A.** See **Russell, W. W.**
- Harley, J. L.** See **Wilkins, W. H.**
- Harlow, W. M., and Wise, L. E.**, chemistry of the plant cell wall. VIII. Cellulose in hair-cap moss, III, 1112.
- Harman, M. T., and Kirgis, H. D.**, development and atresia of the Graafian follicle and division of intra-ovarian ova in the guinea-pig, III, 584.
- Harman, R. A.**, hydrolysis of benzoic and related esters in varying media, I, 615.

- Harmand, J. See Vêrain, M.
 Harmon, J. See Marvel, C. S.
 Harms, A. See Buckner, G. D.
 Harms, H., energy ratio of the OH-OH linking, I, 455.
 Rossler, H., and Wolf, K. L., internal friction and internal lubrication, I, 15.
 Harmsen, E. J., crystal structure of NH_4HgCl_3 , I, 244.
 Harmsen, G. W., and Verweel, H. J., influence of growth-promoting substances on determinations of bacterial density by the plating method, III, 337.
 Harnapp, G. O., determination of Ca ion activity in biological fluids, III, 234.
 Harned, B. K., and Cole, F. V., synergism of physostigmine and strychnine [on blood-sugar], III, 300.
 Harned, H. S., thermodynamics of hydrochloric acid in dioxan-water mixtures from e.m.f. measurements. VIII. Extrapolations in 82% dioxan mixtures and standard potentials, I, 144. Ionisation of acetic acid, I, 199.
 and Calmon, C., properties of electrolytes in mixtures of water and organic solvents. I. Hydrochloric acid in ethyl alcohol- and isopropyl alcohol-water mixtures of high dielectric constant, I, 463.
 and Cook, M. A., thermodynamics of aqueous sodium chloride solutions from 0° to 40° from e.m.f. measurements, I, 200.
 and Fallon, L. D., properties of electrolytes in mixtures of water and organic solvents. II. Ionisation constant of water in 20, 45, and 70% dioxan-water mixtures. III. Ionisation constant of acetic acid in 82% dioxan-water mixture, I, 565.
 Morrison, J. O., Walker, Fletcher, Donelson, J. G., and Calmon, C., thermodynamics of hydrochloric acid in dioxan-water mixtures from e.m.f. measurements. X. General summary and critique, I, 144.
 and Walker, Fletcher, thermodynamics of hydrochloric acid in dioxan-water mixtures from e.m.f. measurements. IX. Properties of the 82% dioxan mixtures, I, 144.
 Harnwell, G. P., atomic nuclei, I, 297.
 Harper, A. A. See Carmichael, E. A.
 Harper, D. R. See Dewey, P. H.
 Harper, S. H., precursor of Buckley's compound, II, 273. Active principles of leguminous fish-poison plants. I. Properties of *l*- α -toxicarol isolated from *Derris malaccensis* (Kinta type). II. Isolation of *l*-elliptone from *Derris elliptica*. III. Structure of elliptone, II, 334, 442, 519.
 Harper, W. F., blood supply of heart valves in relation to endocarditis, III, 234.
 Harpman, J. A., and Woollard, H. H., tendon of the lateral pterygoid muscle, III, 111.
 See also Woollard, H. H.
 Harpoth, H., and Gad, U., pleural perforation in pulmonary tuberculosis; [composition of air in pneumothorax], III, 25.
 Harradence, (Miss) R. H., Hughes, G. K., and Lions, F., derivatives of chromanone, II, 524.
 and Lions, F., synthesis of derivatives of fluorene from 1-hydrindone via the "Mannich" reaction, II, 481. Morpholinomethyl alkyl ethers, II, 488.
 Harradence, (Miss) R. H., and Lions, F., indoles. VIII. 3-Hydroxymethylindole-2-carboxylactone. IX. Reaction of phenylhydrazine with "Mannich" bases, II, 488, 520. Use of morpholine for production of "Mannich" bases, II, 523.
 See also Cornforth, J. W.
 Harrell, G. T., Street, D. M., and Reiser, R., chylothorax and chylous ascites, III, 842.
 Harrelson, R. T. See Sure, B.
 Harren, F. See Deuticke, H. J.
 Harreveld, A. van, nerve supply of doubly- and triply-innervated crayfish muscles related to their function, III, 827. Doubly-, triply-, quadruply-, and quintuply-innervated crustacean muscles, III, 827. Influence of asphyxia on reciprocal innervation, III, 1036.
 and Marmont, G., asphyxia of spinal cord of the cat, III, 371. Course of recovery of the spinal cord from asphyxia, III, 666.
 and Wiersma, C. A. G., function of quintuple innervation of crustacean muscle, III, 1035.
 See also Kok, D. J.
 Harries, E. H. R., Swyer, R., and Thompson, N., sulphanilamide in typhoid fever, III, 857.
 Harriman, B. R. See Whitmore, F. C.
 Harrington, D., dust in industrial work, III, 936. Welfare problems of mining industry, III, 1092.
 Harrington, E. L., viscosity of air, I, 191.
 See also Thiessen, G. J.
 Harrington, H. L., and Huggins, C., removal of thorium dioxide from the blood stream, III, 616.
 Harrington, R. A., simplified construction of Hull-Davey charts, I, 104.
 Harris, A., cardiazol treatment of schizophrenia, III, 249.
 Harris, A. S., mammalian plantar reflexes in terms of afferent fibres, III, 245.
 Harris, A. W., and Gibson, J. G., jun., changes in blood volume in Bright's disease with or without oedema, renal insufficiency, or congestive heart failure and in hypertension, III, 960.
 Lynch, G. W., and O'Hare, J. P., periarteritis nodosa, III, 823.
 See also Gibson, J. G., jun.
 Harris, E. J., and Egerton, A. C. G., decomposition and ignition of peroxides. I. Diethyl peroxide, I, 31. Decomposition of organic peroxides, I, 87.
 Harris, E. See De Gowin, E. L.
 Harris, L. H., nature of grain dust antigen; crossed reactions to grain dusts and smuts, III, 1091.
 Harris, L. J. See Banerji, G. G., and Wang, Y. L.
 Harris, J. O. See Cocker, W.
 Harris, J. S., *in vitro* formation of oxidising agent by surviving tissues and sulphanilamide, III, 1000.
 and Michel, H. O., formation of methaemoglobin and sulphhaemoglobin during sulphanilamide therapy, III, 1000.
 Harris, L. H., allergy to grain dusts and smuts, III, 936.
 Harris, M. See Sookne, A. M.
 Harris, M. M., Blalock, J. R., and Horwitz, W. A., metabolic studies during insulin hypoglycaemia therapy of the psychoses, III, 300.
 See also Polatin, P.
 Harris, P. L., and Poland, G. L., effect of bananas on laxation, III, 506.
 and Remington, R. E., effect of yeast and of thiamin on production of low-iodine goitre, III, 495.
 Harris, R. C., adsorption of protein by filter-paper in the determination of albumin in serum, III, 552.
 Harris, R. S., Bunker, J. W. M., and Mosher, L. M., quantitative measurement of the ultra-violet activation of sterols. I. Ergosterol, II, 18.
 See also Bunker, W. M.
 Harris, S. A., and Folkers, K., synthesis of vitamin-B₆, II, 340.
 Stiller, E. T., and Folkers, K., structure of vitamin-B₆, II, 340.
 See also Milas, N. A.
 Harris, T. H. See Nive, E. O.
 Harris, T. H., jun. See Spies, J. R.
 Harris, W. E. See Bowden, S. T.
 Harris, W. H., local protection against infection with type I pneumococcus, III, 1101.
 Harris, W. T. See Barschall, H. H.
 Harrison, C. J., and Roberts, E. A. H., fermentation process in tea manufacture. IV. Tea-tannin and its fermentation products, III, 951.
 Harrison, C. V., effect of sympathectomy on development of experimental arterial disease, III, 562.
 See also Vaughan, J. M.
 Harrison, D. C., and Mellanby, E., phytic acid and the rickets-producing effect of cereals, III, 1073.
 See also Hawthorne, J. R.
 Harrison, F., modifications in technique for use of the Horsley-Clarke stereotaxic instrument, III, 246.
 Wang, S. C., and Berry, C., decussations of sympathetic efferent pathways from the hypothalamus, III, 749.
 See also Corbin, K. B., and Wang, S. C.
 Harrison, F. F., coarctation of aorta of adult type, associated with cystic degeneration of media in first portion of arch, III, 561.
 Harrison, G. E. See Hirst, W.
 Harrison, G. R., high-speed method of absorption spectrophotometry for the range 10,000 to 2000 Å., I, 491. New tables of the 100,000 principal spectrum lines of the chemical elements between 10,000 and 2000 Å., I, 501.
 Harrison, J. A. See Steward, F. C.
 Harrison, K., metabolites of contracting muscle; utilisation of fumarate, III, 998.
 See also Bell, D. J.
 Harrison, R. See Genders, R.
 Harrison, Roland W., bacterial flora in experimental dental caries of the rat, III, 430.
 Harrison, S. A. See Lauer, W. M.
 Harrison, T. R. See Merrill, A., and Williams, J. R.
 Harrold, G. C., Meek, S. F., and Holden, F. R., rapid determination of lead in the atmosphere, I, 157.
 Harshfield, G. S. See Patton, A. R., and Thorp, F., jun.
 Hart, B. F., and Evans, E., ineffectiveness of sulphanilamide in rabies from vaccinated dogs, III, 610.
 Hart, C. P. See Stuart, H. O.
 Hart, E. B. See Bird, H. R., Clifton, L. E., Deobald, H. J., Hegsted, D. M., Hove, E., Kohler, G. O., McKibbin, J. M., Potter, I. R., and Wiese, A. C.

- Hart, G. H. See Cole, H. H.
- Hart, J. P., and Everett, M. R., isolation of ketouronic acids as crystalline alkaloidal salts, II, 405.
- Hart, L. E., McClelland, E. W., and Fowkes, F. S., chlorination of *o*-thiolbenzoic acid, II, 65.
- See also Bartlett, R. G.
- Hart, M. J. See Cook, E. S., and Looibourou, J. R.
- Hart, P. D. A. See Aslett, E. A.
- Hart, R. S., and Wise, L. E., possibility of faulty diagnosis of diabetes in patients taking thiamin chloride; [effect on urine], III, 596.
- Hart, R. T. See Iddles, H. A.
- Hart, W. F., and Niederl, J. B., thiazolinophenols [hydroxyphenylthiazolines]; 5-methyl- and 5:5-dimethyl-thiazolinophenols, by-products, and derivatives, II, 347.
- Hart, W. D. See Arnot, F. L.
- Harteeck, P. See Groth, W., and Schaeffer, W.
- Hartelius, V., value of amino-acids as nitrogen sources for yeast, III, 326. Nitrogen assimilation of yeast. XII. Value of amino-acids as nitrogen sources for yeast, III, 520. Increasing growth-promotion by beer wort by treatment with alkali or hydrochloric acid, III, 626. Growth-promoting action of amino-acids [for yeast]. IV. Increase in growth-promoting action of beer wort by treatment with alkali or hydrochloric acid, III, 790. Growth factors of beer wort as limiting factor for yeast growth, and their influence on the "economic coefficient," III, 1010.
- See also Nielsen, N.
- Hartfall, S. J., gastroscopy in achlorhydria, III, 592.
- Garland, H. G., and Goldie, W., new gold salt in treatment of rheumatoid arthritis, III, 414.
- Hartig, K., double nucleate sympathetic ganglion cells of the puppy, III, 35.
- Hartley, F., and Linnell, W. H., structure of γ -sugars. I. Parachors of partly and fully methylated derivatives of γ -fructose, II, 142.
- Hartley, G. See Freeman, G.
- Hartley, G. A. R., Henry, T. H., and Whytlaw-Gray, R., tellurium tetrafluoride, I, 92.
- Hartley, G. S., transport numbers of paraffin-chain salts in aqueous solution. II., I, 28. Solvent properties of aqueous solutions of paraffin-chain salts. I. Solubility of *trans*-azobenzene in solution of cetylpyridinium salts, I, 71. Ion aggregation in solutions of long paraffin-chain salts, I, 469. Diffusion of an aggregating electrolyte in the transition range from simple to colloidal solution, I, 521.
- and Le Fèvre, R. J. W., dipole moments of *cis*- and *trans*-azobenzenes and related compounds, I, 302.
- and Runnicles, D. F., porous diaphragm method of measuring diffusion velocity, and velocity of diffusion of potassium chloride in water. II. Determination of the size of paraffin-chain salt micelles from diffusion measurements, I, 140.
- See also Samis, C. S.
- Hartley, P. H., and Llewellyn, G. F., longevity of oarsmen, III, 596.
- Hartman, C. G., use of gonadotropic hormones in the adult rhesus monkey, III, 269.
- and Smith, C., non-effect of irradiation of the hypophysis in sterile monkey females, III, 260.
- See also Ball, J.
- Hartman, E. See Pierce, H. B.
- Hartman, F. A., Lewis, L. A., and McConnell, K. P., refractory state produced by adrenal extract, III, 581.
- Spoor, H. J., and Lewis, L. A., sodium factor of the adrenal, III, 682.
- Hartman, F. W., etiological factors and lesions in cerebral anoxia, III, 129.
- Hartman, P. L., and Smith, L. P., investigation of the linear accelerator, I, 538.
- Hartman, R. J., Storms, L. B., and Gassmann, A. G., effect of polar groups on esterification velocities of substituted benzoic acids with cyclohexanol, I, 529.
- Hartmann, A. F., Perley, A. M., and Barnett, H. L., physiological effects of sulphanilamide. II. Methaemoglobin formation and its control, III, 304.
- Perley, A. M., Basman, J., Nelson, M. V. Asher, C., and Morton, M., metabolism and clinical uses of sodium lactate, III, 174.
- See also Barnett, H. L.
- Hartmann, E. See Giroud, A.
- Hartmann, G., distribution of group antigen in excretors and non-excretors. II., III, 209. Anti-group enzyme in human saliva and salivary glands, III, 938.
- Hartmann, H. See Wittig, G.
- Hartmann, M., and Bosshard, W., chemical and enzyme-chemical preparation of adenosine, III, 197.
- and Isler, H., chemical constitution and pharmacological action of iminazolines substituted in position 2, III, 614.
- and Panizzon, L., catalytic hydrogenation of benzimidazole derivatives, II, 37.
- Schartau, O., Kuhn, R., and Wallenfels, K., sex substance of sea-urchin, III, 912.
- Hartog, H. A. P. See Halbertsma, T., and Nieuwenhuizen, C. L. C. van.
- Hartree, D. R., and Hartree, W., wave functions for negative ions of sodium and potassium, I, 168.
- Hartree, W., and Swirles, B., self-consistent field, including exchange and superposition of configurations, with some results for oxygen, I, 506.
- Hartree, E. F. See Keilin, D.
- Hartree, W. See Hartree, D. R.
- Hartridge, H., methods and apparatus for micro-gas analysis, I, 626.
- Hartsuch, P. J., separating oleic acid from saturated acids and from linoleic acid; preparation of oleic acid, II, 297.
- Hartt, C. E., water and cane ripening, III, 1016. Synthesis of sucrose by excised blades of sugar cane, III, 1017.
- Hartung, uleron and local treatment of gonorrhoea, III, 178.
- Hartwell, G. A., digestion of margarine, III, 624.
- Harvey, A. M., action of quinine on skeletal muscle, III, 368. Action of tetanus toxin on skeletal muscle, III, 566, 900. Action of quinine in myotonia and myasthenia, III, 826. Actions of procaine on neuromuscular transmission, III, 1034.
- See also Brown, G. L.
- Harvey, C. O., determination of water in silicates, I, 428.
- Harvey, E. N., luminescence of adhesive tape [and other substances], I, 404. Luminescence of sugar wafers, I, 509. Sonoluminescence and sonic chemiluminescence, I, 555. Bioluminescence, III, 194.
- and Korr, I. M., luminescence in absence of oxygen in the ctenophore, *Mnemiopsis leidyi*, III, 278.
- and Schoepfle, G., interfacial tension of intracellular oil drops in eggs of *Daphnia pulex* and in *Amaba proteus*, III, 869.
- See also Davis, H.
- Harvey, G. G., derivation of the formula for total scattering of X-rays from a general crystal, I, 304. Scattering of X-rays from crystals, I, 512.
- Harvey, H. W., substances controlling growth of a diatom, III, 849.
- Harvey, R. J. See Underwood, E. J.
- Harvey, S. C. See Burr, H. S., and Taffel, M.
- Harvill, E. K., toxicity of various esters prepared from chrysanthemum-monocarboxylic acid, the acidic portion of pyrethrin I, III, 618.
- Hasama, B., effect of ultra-violet rays on the electroencephogram, III, 377. Effect of perfusate of X-rayed frog's leg on adrenals, III, 478. Parasympathetic nerve supply of the adrenals, III, 682. Bioelectric reaction of isolated brain to drugs, III, 830. Bioelectric reactions of isolated pancreas due to drugs, III, 986.
- Haschad, M. N. See Brockmann, H.
- Hasché, E., action of short waves (3-5 m.) on tissue cultures, III, 193. Dosimetry for radium applicators, III, 717. New units in short-wave therapy, III, 783. Studies of joints in living subjects by X-ray motion pictures, III, 955.
- and Bolze, J., action of electrical short waves on the rate of the frog's heart, III, 235.
- Hasebe, N. See Yamada, K.
- Hasegawa, S., and Kochi, M., homogeneous cultures of Actinomyces; new serological phenomenon, III, 725. Complement-fixation test in tuberculosis, III, 728. Acid-fastness of the tubercle bacillus and formation of homogeneous emulsions, III, 795.
- and Nakamoto, T., use of various chemicals in bacteriology, III, 729.
- Hasegawa, T., hormonal action of spleen on gastric acidity, III, 63. Action of cholic acid on acidity, and on chloride, sodium, and potassium content of gastric juice of a Pavlov pouch in dogs, III, 63. Action of splenectomy on alkalinity of intestinal juice, III, 63. Glucose assimilation in rats after administration of stercholeonic acid, III, 65. Composition of bile of the kurodai fish, III, 66.
- Hasenbring, O. See Deuticke, H. J.
- Hashida, M., influence of carcinogenic substances on the transplantation of embryonic tissues, III, 70.
- Hashimoto, A. [with Koyama, S.], synthesis of sphaerophorin, II, 424.
- Hashimoto, M. See Masayama, T.
- Hashimoto, T. See Sakaki, Takaoiki.
- Hashmi, M. S. See Bhatnagar, S. S.
- Hasimoto. See under Hashimoto.
- Haskelberg, L. See Weizmann, C.
- Haskelberg, R. See Bergmann, E.

- Haskins, C. P. See Cooper, F. S., and Zahl, P. A.
- Haskins, W. T., and Hudson, C. S., preparation of *L*-tartaric acid from racemic tartaric acid through resolution by a substituted benzimidazole base, II, 344.
- Haslewood, G. A. D., action of light on substances related to ergosterol, II, 261. Metabolism of steroids. I. 7-Hydroxycholesterol and "hepatols" from ox liver, III, 707.
- and Strookman, T. A., determination of "true" sugar in 0.05 ml. of blood, III, 818.
- See also Bergstrom, S.
- Hasley, D. E., and Schaller, H., preparation of liver media, III, 434.
- Hass, G. M., tissue reactions to natural oils and fractions thereof, III, 15. Inter-cellular transformations of unsaturated fatty acids and esters, III, 298. Hydrolysis of esters in the intercellular medium, III, 298. Membrane formation at lipid-aqueous interfaces in tissues. I. II. Correlation of morphological and chemical aspects, III, 393, 1094. Elastic tissue, III, 545.
- Hass, H. B. See Lippincott, S. B., and Seigle, L. W.
- Hasse, A. See Ehrismann, O.
- Hassebrauk, K. See Gassner, G.
- Hassel, O. See Frivold, O. E., and Halmdø, E.
- Hasselstrom, T., and Hampton, B. L., hydration of dihydropimaric acid, II, 273.
- and McPherson, J. D., dibromodihydroabietic acid, II, 334. Conversion of *L* into a *D*-abietic acid, II, 517.
- Hassencamp, E., treatment of essential hypertension, III, 310.
- Hassenpflug, H., gold treatment of lupus erythematosus, III, 188.
- Hassid, W. Z., water-soluble glucosan from barley roots, II, 301.
- See also Ruben, S.
- Hassin, G. B., quinine and dystonia musculorum deformans, III, 1034.
- and Diamond, I. B., "silver cells" and "spirochete-like" formations in multiple sclerosis and other diseases of central nervous system, III, 670.
- and Poncher, H. G., dystonia musculorum deformans; clinicopathologic report of a case, III, 1037.
- Hassouna, M. M., and Allen, L. A., gas production in *Bacterium coli* and by lactic acid streptococci under different conditions, III, 524.
- Hastings, A. B., Muus, J., and Bessey, O. A., tissue metabolism in vitamin deficiencies. I. Effect of deficiencies in riboflavin and other heat-stable vitamin-B components, III, 854.
- See also Cohn, D. J., Danielson, I. S., Kiese, M., Manery, J. F., Muus, J., and Weir, E. G.
- Hata, K. See Simada, T.
- Hata, S., allanite from the Abukuma granite region, I, 500.
- Hata, T. See Fujita, A.
- Hatakeyama, T., Takahashi, Kyutaro, Tsumi, Y., and Yamasaki, K., changes in plasma-fat in diabetes mellitus, III, 554. Effect of ingestion of fats on diabetics, III, 608.
- Hatano, M. See Sato, Hiroshi.
- Hatch, G. B., and Rice, O., surface-active properties of hexametaphosphate, I,
- Hatch, T., lead hazard at soldering benches, III, 1093.
- Williams, C. E., and Dolin, B. G., dust concentration in foundries [and silicosis], III, 621.
- Haterius, H. O., and Ferguson, J. K. W., evidence for the hormonal nature of the oxytocic principle of the hypophysis, III, 259.
- Hatfield, M. R. See Haring, M. M.
- Hathaway, I. L., Davis, H. P., Reece, R. P., and Bartlett, J. W., effect of pregnancy urine extract on lactation in the rat, III, 984.
- See also Reece, R. P.
- Hathaway, M. L., and Meyer, F. L., citric acid and its salts as calcifying agents in rats, III, 1073.
- Hatt, H. H., chemiluminescence of organic compounds, I, 301.
- Hattori, J., isomerides of 3:5:6-trihydroxy-cholanic acid, II, 425. Δ^5 -Norcholesten-3-ol-25-one, an oxidation product of cholesteryl acetate dibromide, II, 431.
- Hattori, K., preparation of $\Delta^{3,5}$ -cholesta-diene, II, 55.
- Hauch, E., numal nirvapon narcosis in normal delivery, III, 778.
- Hauduroy, P., preservation of streptococci in the cold after desiccation, III, 1013.
- Hauenstein, V. See McGuire, J.
- Hauer, F. von, mitogenic rays, III, 1007.
- Hauer, L. See Heupke, W.
- Hauff, E. von, influence of field-articulation on sound-localisation in the so-called complication-experiment, III, 753.
- Hauffe, K. See Wagner, C.
- Haug, A. See Bickel, A., and Koschara, W.
- Hauge, N. See Viebel, S.
- Haul, R. See Winkel, A.
- Haupt, G. W., departures from additivity among Lovibond red glasses in combination with Lovibond 35 yellow, I, 43.
- Hauptman, E., absorption of carbon disulphide vapour in the Schumann region, I, 57.
- Hauptmann, H., restoration of sweat secretion after section of peripheral nerves, III, 827.
- and Franca, J., constitution of cafesterol. I, II, 367.
- Hauptstein, P., and Otto, U., mechanism of action of prolactin, III, 259.
- and Stokert, M., duration of human pregnancy, III, 587.
- Haurowitz, F., arrangement of peptide chains in molecules of spheroproteins, II, 42. Fortschritte der Biochemie, 49, Part III (1931-38), III, 1061.
- and Appel, G., precipitation of iodoproteins of different iodine content by anti-iodine sera, III, 1106. Chemical analysis of complement fixation, III, 1107.
- and Astrup, T., ultra-violet absorption of genuine and hydrolysed protein, III, 420.
- See also Munzberg, F. K.
- Haury, V. G., effect of intravenous injections of magnesium sulphate on the vascular system, III, 715. Effect of intravenous magnesium sulphate on volume of extremities, III, 822.
- and Gruber, C. M., action of pentamethylentetrazole (metrazol) on the circulatory system, III, 509.
- Gruber, C. M., jun., and Gruber, C. M., effects of thio-barbiturates on splenic and renal volumes, III, 932.
- See also Cantarow, A., and Hirschfelder, A. D.
- Hausberger, F. X., fat deposition in denervated fat tissue, III, 608.
- and Neuenschwander-Lemmer, N., diastase content of denervated fat tissue, III, 901.
- Hauschild, F., pharmacological actions of ephedrine derivatives, III, 180. Pharmacology of 2-methylamino-1-phenylpropane (pervitin), III, 864.
- Hauschulz, B. See Klemm, W.
- Hauser, C. R., and Breslow, D. S., condensations brought about by bases. V. Condensation of the anhydride with the aldehyde in the Perkin synthesis. VI. Mechanism of the Perkin synthesis, II, 262.
- See also Bright, R. D., Le Maistre, J. W., Peck, R. L., and Rainsford, A. E.
- Hauser, E. A., and Le Beau, D. S., colloidal clays. I, I, 23. General function between viscosity and particle size, I, 142.
- See also Andreas, J. M.
- Hauser, M. See Ginnings, P. M.
- Hauser, W., physiology of tannin in plant cells, III, 212. "Spherocrystals" in *Hyoscyamus niger*, III, 216. Physiology of tannin in the plant cell, III, 340.
- Hausknecht, K. See Bnschbeck, H.
- Hauss, L. See Handovsky, H.
- Hauss, W., blood pressure determination in the palmar arch, III, 896.
- and Yamanaka, T., blood changes in necrosis of heart and striated muscle, III, 349.
- See also Matthes, K.
- Hauss, W. H., and Shen, T. C. R., action of potassium on chemo-receptors of carotid sinus, III, 966.
- See also Shen, T. C. R.
- Hausser, I., dielectric behaviour of organic "zwitterions" with special reference to brain and nerve substance, III, 320. Action of short- and long-wave ultra-violet light on human skin, III, 1006.
- Hauth, W., histology of cells in gastric juice, III, 483.
- Hautot, A., and Sauvenier, H., Auger effect and *L* emission lines, I, 394.
- Havas, L., effects of trimethylamine in plants and animals suggestive of hormonal influence, III, 412.
- Havas, P. See Beck, G.
- Havemann, R., photo-electric colorimeter, I, 389.
- and Heubner, W., haemoglobin-met-haemoglobin redox system, III, 551.
- Jung, F., and Issekutz, B. von, jun., photo-electric determination of methaemoglobin in blood, III, 814.
- Haven, F. L., effect of cod-liver oil on tumour growth, III, 281.
- and Bale, W. F., fate of phospholipin injected intravenously into the rat, III, 854.
- Havens, R. J. See Rollefson, R.
- Hawes, R. C., high-performance electronic relay, I, 340.
- Hawk, F. L. See Northup, D.
- Hawker, L. E., influence of various sources of carbon on formation of perithecia by *Melanospora destruens*, Shear, in presence of accessory growth factors, III, 791. Nature of accessory growth factors influencing growth and fruiting of *Melanospora destruens*, Shear, and of other fungi, III, 1011.
- Hawkes, C. D. See Richter, C. P.
- Hawkes, J. A. See Travers, M. W.

- Hawking, F., Hennelly, T. J., and Wales, W. T., trypanocidal activity and arsenic content of the cerebrospinal fluid after administration of arsenic compounds. II, III, 82.
- Hawkins, E. G. E., Hirst, E. L., and Jones, J. K. N., methyl ethers of araboascorbic acid and their isomerism, II, 140.
- Hawkins, J. E. See Rawdon-Smith, A. F.
- Hawley, J. E., jun. See Maddock, S.
- Hawley, H. See Shortt, H. E.
- Hawley, K. J. See Richards, O. W.
- Hawley, P. L. See Carpenter, C. M.
- Haworth, E., Heilbron, I. M., Jones, William Edward, Morrison, A. L., and Polya, J. B., oxidation of vitamin-A by the Oppenauer reagent. II, II, 114.
- Haworth, F. E., X-ray test of superstructure in FeNi_3 , I, 11. Superstructure in FeNi_3 , I, 13.
- Haworth, R. D., and Barker, R. L., synthesis of 1:12-dimethyl-7-isopropyl-octa-hydrophenanthrene-1-carboxylic acid, II, 478.
- and Woodcock, D., constituents of natural phenolic resins. XIII. Synthesis of *dl*-, *d*-, and *l*-hinokinin. XIV. Synthesis of *dl*-, *d*-, and *l*-matairesinol dimethyl ether. XV. Stereochemical relationship of lariciresinol and pinoresinol. XVI. Synthesis of lignan diols, II, 63, 122, 383, 476.
- Haworth, W. N., structure of cellulose and other polymerides related to simple sugars, II, 534.
- Jackson, J., and Smith, F., transformation of α - and β -forms of 3:6-anhydro-methylgalactosides, II, 99.
- Lake, W. H. G., and Peat, S., configuration of glucosamine (chitosamine), II, 144.
- Peat, S., and Whetstone, J., descent of the series of methylated sugars by the Weerman reaction, II, 50.
- See also Anderson, C. G.
- Hawthorne, J. R., and Harrison, D. C., cytochrome c as a carrier in the glucose-dehydrogenase system, III, 1096.
- Haxby, R. O., Allen, J. S., and Williams, J. H., angular distribution of the disintegration products of light elements, I, 172.
- See also Hill, E. L., and Shepherd, W. G.
- Hazel, O., energy and range of the heavy uranium residues, I, 443.
- Hay, J. D. See Chamberlain, E. N.
- Hay, K. D. See Davis, H. L.
- Hay, R. See Rait, J. R.
- Hayashi, H., action of extracts of several endocrine glands on calcium and phosphorus content of skeletal muscle and bone, III, 475. Action of thyroid extracts on serum-potassium, -calcium, and -protein, III, 476.
- Hayashi, I., importance of dyes in tissue respiration, III, 854.
- Hayashi, T. See Yabuta, T.
- Haydak, M. H., and Palmer, L. S., vitamin-E content of royal jelly and "bee bread," III, 497.
- Hayden, A. A., hearing aids from otologists' audiograms, III, 38.
- Hayden, C. C. See Knoop, C. E.
- Hayes, D. M. See Gilman, H.
- Hayes, F. L. See Smith, M. A.
- Hayes, F. R., pipette for micro-determination of respiratory gases, III, 462. Relation of fat changes to general chemical embryology of sea urchin, III, 807.
- Hayhurst, E. R., poisoning by petroleum distillates, III, 92.
- Haymaker, W. See Anderson, Evelyn.
- Hayman, C. R., analysis of reactions following use of diphtheria toxoid and guides to their occurrence, III, 1101.
- Hayman, J. M., jun., Shumway, N. P., Dumke, P., and Miller, Maz., experimental hyposthenuria, III, 486.
- See also Miller, Maz.
- Hayman, J. W., Martin, J. W., and Miller, Maz., renal function and number of glomeruli in human kidney, III, 1060.
- Hayman, M., and Brody, M. W., metrazol therapy in schizophrenia, III, 572.
- Haynes, A., and McCance, R. A., simple electrical apparatus for heating single crucibles, I, 579.
- Haynes, C. F. See Hammersland, H. L.
- Haynes, F. See Haldane, J. S.
- Hays, E. E., and Gustavson, R. G., simple apparatus for demonstrating Boyle's law, I, 434.
- Hays, H. W. See Gaunt, R., Parkins, W. M., and Swingle, W. W.
- Hayward, S. J., Pollock, J. H., and Loeb, L., effects of formalin on thyroid-stimulating and gonadotropic hormones of cattle anterior pituitary glands, III, 473.
- Hazard, R., silicotungstates of tropine and of its derivatives, II, 396. Differentiation between potassium and acetylcholine by sparteine, III, 929. Trop-anol et pseudotropanol; actions physiologiques comparées [comparative physiological effects of tropine and pseudotropine], III, 954.
- and Cheymol, J., action of calcium on muscarine- and nicotine-like effects of acetylcholine, III, 1002.
- Cheymol, J., and Quinquaud, A., prevention of apnoea by apomorphine, III, 91. Toxic apnoea and methylene-blue, III, 776. Effect of nicotine on respiratory rhythm in the cat, III, 776. Prevention of adrenalectomy apnoea by diethylaminomethylidioxan (883 F.) and by piperidomethylbenzidioxan (933 F.), III, 776. Prevention of toxic apnoea produced by adrenaline or yohimbine in rabbit by apomorphine, III, 1001. Effect of thionine and toluylene-blue on adrenaline and yohimbine apnoea, III, 1001.
- and Mangeot, A., toxicity of a mixture of adrenaline and cocaine in the guinea-pig, III, 181.
- and Moisset de Espanès, E., action of F. 933 on the isolated intestine, III, 83.
- and Wurmser, L., differentiation of effects of potassium and acetylcholine by means of magnesium, III, 1002.
- Hazay, C. E. See Rein, C. R.
- Hazelhoff, E. H., oxygen utilisation in various aquatic animals, III, 825.
- Hazelton, C. L. See Curry, J.
- Haziwe, N. See Tamesuke, O.
- Hazlehurst, T. H., analogues of entropy, I, 409.
- Hazlet, S. E., sulphonate esters of 4:4'-dihydroxydiphenyl, II, 416.
- Alliger, G., and Tiede, R., bromination of *p*-diphenyl benzoate, II, 369.
- Hazlewood, S. J., Hughes, G. K., and Lions, F., heterocyclic compounds derived from 5- and 8-aminoquinoline, II, 184.
- Head, F. S. H., and Robertson, A., syntheses of glycosides. XI. Cichoriin, II, 469.
- Headrick, L. B. See Martin, S. T.
- Healea, (Miss) M., secondary electron emission due to H_2^+ and D_2^+ ions, I, 394.
- Healey, M. See Pope, C. G.
- Healey, R. H., behaviour of electrons in iodine vapour, I, 51.
- Healy, T. V. See Foster, R. T.
- Heaps, C. W., magnetoresistance of nickel in large fields, I, 408.
- Heard, R. D. H., and Winton, S. S., dietary anaestrous adult rat for assay of oestrus-inducing gonadotropic substance, III, 978.
- Hearman, J., minor elements and the pine, III, 108.
- Hearne, G. See Groll, H. P. A.
- Hearne, J. F. See Knapp, A. W.
- Heaslip, W. G., vitamin-C nutrition and susceptibility to diphtheria as possible factors in the epidemiology of poliomyelitis, III, 289.
- Heath, C. W. See Maddock, S., and Pohle, F. J.
- Heath, L. M., tuberculin studies relative to potency determinations, III, 333.
- Heath, O. V. S., relation between carbon assimilation and stomatal movement. I. Apparatus and technique, III, 801.
- and Gregory, F. G., constancy of the mean net assimilation rate [of plants] and its ecological importance, III, 340.
- Heatley, N. G., micro-burette, I, 222.
- Berenblum, I., and Chain, E., micro-respirometer, III, 295.
- See also Berenblum, I.
- Hebb, C. O., suppression by ergotamine of bronchoconstriction, III, 824.
- Hebb, M. H. See Nordheim, L. W.
- Hebeler, F. See Winkler, H.
- Heberlein, E. See Wahl, A.
- Hebestreit, H., skin disease from Rapid Fast dyes in calico-printing, III, 95.
- Hébraud, A., study of intercostal spaces from histological serial sections, III, 223.
- Hecan. See Conlonjou.
- Hechler, G. See Hilpert, R. S.
- Hecht, F., and Korkisch, F., micro-gravimetric determination of cobalt with 1-nitroso- β -naphthol, I, 41.
- Hecht, H., examination of spinal fluid for diagnosis of general paresis, III, 32.
- Hecht, R., Rappaport, B. Z., and Welker, W. H., chemistry and immunology of ragweed pollen proteins, III, 418.
- Hecht, S., and Mandelbaum, J., vitamin-A and dark adaptation, III, 675.
- and Mintz, E. U., visibility of single lines at various illuminations and retinal basis of visual resolution, III, 753.
- Hecht, U., metabolism of cystine and methionine, III, 707.
- Hechter, O. See Levine, R.
- Hechtman, J. See Anderson, Ernest.
- Heck, F. J., and Hall, B. E., leukaemoid reactions of the myeloid type, III, 549.
- See also Kaump, D. H.
- Heck, K. See Ogden, E., and Shock, N. W.
- Heckel, G. B. See Rickson, C. C.
- Heckel, G. P., and Allen, W. M., maintenance of corpus luteum and inhibition of parturition in the rabbit by injection of oestrogenic hormone, III, 586.
- See also Allen, W. M.
- Heckel, N. J., production of oligospermia in man by testosterone propionate, III, 1057.
- See also Thompson, W. O.
- Heckscher, H., cardiac and respiratory neurosis, III, 654.

- Hedde, W. J., and Percival, E. G. V., isolation of derivatives of 2-methylglucose and 3-methylglucose from a partly methylated cellulose, II, 112.
- Hedén, K., occurrence of heterogenetic antibodies in tuberculosis, Hodgkin's and Schaumann's diseases, III, 334.
- Hedenius, P., metachromasia and complement, III, 354. Attempts to inhibit growth of Jensen tumours in rats by depot treatment with heparin, III, 847.
- Hedman, F. A., interfacial tensions of mercury-hydrocarbon oil [systems], I, 74.
- Hédon, L., and Loubatières, A., permanent diabetes induced in a normal dog by repeated injections of anterior pituitary extracts unaccompanied by raised basal metabolic rate, III, 974.
- Loubatières, A., and Bronsny, J., cerebellar lesions following hyperglycaemia in a depancreatised dog, III, 31.
- Loubatières, A., and Heymann, G., prolonged treatment of depancreatised dog with protamine-zinc-insulin, III, 910.
- Hedlund, I. See Ramberg, L.
- Hedvall, J. A., reaction investigations with activated solid materials, I, 153.
- and Berg, A., magnetic transformation and catalytic activity. VI. Catalytic investigations with magnesium oxide, ferric oxide, and various kinds of iron and steel in the region of loss of ferromagnetic properties, I, 207.
- and Cohn, G., photoactivation of solids and its effect on adsorption, I, 255.
- and Sandberg, S. O., reaction experiments in the solid state with mixtures of active Fe_2O_3 and CaO , I, 93.
- Heeren, J. G., and Müller, Erich, action of discontinuous X-radiation on tissues, III, 784.
- Heeren, R. H. See Greene, J. A.
- Heeres, P. A. See Erwtaman, J.
- Heermann, H., treatment of septicæmia with convalescent blood transfusions, III, 81.
- Heernu, toxic origin of paralysis in the Guillaín-Barré syndrome, III, 605.
- Heerema, P. H., and Moersch, F. S., Adie's syndrome, III, 573.
- Heerswynghels, J. van. See La Barre, J.
- Heesen, W. von. See Fuchtbauer, C.
- Heiter, J. M., nitrogenous muscle extracts, and their importance for study of comparative biochemistry, III, 464.
- Hegan, D. S., and Wolfenden, J. H., kinetics of alkaline hydrolysis of γ -lactones, I, 327.
- Hegedüs, B. See Ruggli, P.
- Hegedušić, M., relation of particle masses in the nuclear structure of the atom; at. wt. formula, I, 351.
- Hegemann, G. See Jotten, K. W.
- Hegendorfer, M. See Enders, C.
- Heger, H. J., optical discrimination in fish, III, 837.
- Hegg, E., action of vitamin-B. in sciatica, III, 286.
- Heggie, R. See Milas, N. A.
- Hegglin, R., circulatory failure in diabetic coma, III, 123.
- and Nabholz, H., adrenal cortex syndrome, III, 139.
- See also Löffler, W.
- Hegler, C., treatment of pneumonia with eubasin, III, 711.
- Hegner, R., and Eskridge, L., passive immunity in avian malaria, III, 203.
- Hegre, E. See Evans, L. T.
- Hegsted, D. M., Oleson, J. J., Elvehjem, C. A., and Hart, E. B., "cartilage growth factor" and vitamin-B₆ in nutrition of chicks, III, 994.
- See also Olson, F. R.
- Hehre, E., and Freund, J., sensitisation, antibody formation, and lesions produced by tubercle bacilli in the albino rat, III, 528.
- Heickon, K., germicidal action and chemical constitution of isomeric xylenols and monohalogenated derivatives, II, 415.
- Heide-Jørgensen, H., case of metastasising carcinoma in mouse produced by auto-transplantation, III, 698.
- Heidelberger, M., Grabar, P., and Treffers, H. P., quantitative studies of antibody purification, III, 525.
- Kendall, F. E., and Toerell, T., precipitin reaction; effect of salts, III, 204.
- See also Menzel, A. E. O.
- Heidt, L. J., photochemical production of reducing sugars from glycosides by ultraviolet light, I, 620.
- Heifitz, A. J. See Gelfand, H. H.
- Heike, W., Schramm, J., and Vaupel, O., system nickel-zinc, I, 364.
- Heilbron, I. M., Johnson, A. W., and Jones, W. Elwyn, polyene series. IV., II, 548.
- Jones, W. Elwyn, and Spinks, A., polyene series. II., II, 548.
- See also Barraclough, E., Batty, J. W., Duerden, A., France, H., and Haworth, E.
- Heilbrunn, G., and Liebert, E., adrenaline level in blood serum during insulin hypoglycemia and after metrazol convulsions, III, 1051.
- Heiler, H., and Lange, Erich, heat of adhesion in non-electrolyte solutions, I, 266.
- Heiligman, H. A. See Seil, G. E.
- Heilmeyer, L., hæmolytic jaundice, III, 389.
- and Mutius, J. von, hæmoglobin determination, hæmometer calibration, and optical constants, III, 650.
- Heim, A. See Burri, C.
- Heim, F., effect of urea on frog's heart, III, 359. Effect of urea on hydration and permeability of frog muscle, III, 368. Effect of urea and narcotics on action of acetylcholine on frog's heart, III, 657. Action of acetylcholine in presence of proteins, III, 860. Effect of urea on action of strophanthin on isolated frog's heart, III, 862.
- Heim, H., therapy of tabetic atrophy of the optic nerve, III, 82.
- Heim, J. W., oxygen and carbon dioxide analyser and an oxygen flowmeter for use in aircraft compartments at high altitudes, III, 563.
- See also Armstrong, H. G.
- Heim, W., blood transfusions with stored blood, III, 551.
- Heiman, J., comparative study of the ovaries and other endocrine glands in rats with benign transplanted breast tumours and in normal rats injected with sex hormones, III, 490.
- Heiman, V. See Lund, W. A.
- Heimbach, (Miss) S. See Prelog, V.
- Heimberger, W., blood-sodium chloride content and gastric disease, III, 651.
- Heimbrecht, M. See Biltz, W.
- Heimbürg, M. See Wiechmann, F.
- Hein, F., formation of organochromium compounds from complex salts of chromium, II, 350.
- and Klein, A. [with Nebe, E.], improved preparation of lead triethyl and lead trimethyl, II, 12.
- Klein, A., and Mesée, H. J., volumetric determination of organic lead compounds, II, 134.
- and Mesée, H. J., thermal decomposition of toluene; exclusive formation of benzyl radicals, II, 13.
- Hein, G., and Vannotti, A., capillarisation and nutrition of the heart under normal and pathological conditions, III, 358.
- Hein, M. A. See Brunstetter, B. C.
- Heinbecker, P. See White, Harvey L.
- Heinemann, A., action of cholestenone-sulphonic acid, III, 935.
- Heinemann, M., distribution of ascorbic acid between cells and serum in relation to its urinary excretion, III, 167.
- Heinen, J. See Diltthey, W.
- Heinermann, E., action of vitamin-C and X-radiation on granuloma gangrænescens, III, 289.
- Heinild, S., essential thrombopenia, III, 549.
- Heinle, R. W., and Miller, F. R., yeast and other extrinsic factors in relation to pernicious anæmia, III, 742. Negative effect of gastric juice administered intravenously to patients with pernicious anæmia, III, 1025.
- Heinlein, H., effect of chronic administration of acetylcholine, III, 777.
- Heinrich, A., influence of food on electrocardiogram, III, 359.
- See also Rieder, W.
- Heinrich, E. See Haberland, G.
- Heinrich, G. See Klemenc, A.
- Heinrich, H. See Leutgoeb, R. A.
- Heintz, E., infra-red spectrum of ascorbic acid, I, 450.
- Heintze, W., theoretical structural examination of the habit of sodium chlorate, I, 407.
- Heinze, W., and Wagener, S., origin of emission centres on surface of oxide cathodes, I, 168.
- Heinzmann, K., culture of measles virus, III, 796.
- Heise, R. See Holtz, P.
- Heisenberg, W., absorption of the penetrating component of cosmic radiation, I, 55. Showers in cosmic rays. II., I, 444.
- Heishman, O. See Miller, W. T.
- Heisig, G. B., α -di-iodobutane from tetrahydrofuran, II, 172.
- See also Klug, H. P.
- Heitler, W., nuclear disintegrations by cosmic-rays, I, 54.
- Powell, C. F., and Fertel, G. E. F., heavy cosmic-ray particles at Jungfrauoch and sea level, I, 594.
- See also Fröhlich, H.
- Heitz-Boyer, See Champy, C.
- Heitzer, K. See Werle, E.
- Heitzmann, P., effect of oxygen on bacterial development, III, 794.
- Heiwinkel, H. See Euler, H. von.
- Helberger, J. H., and Hever, D. B., new case of chemoluminescence. II. Benzporphins. V., II, 128.
- and Rebay, A. von, benzporphins. VI. Catalytic hydrogenation of *o*-cyanoacetophenone; synthesis of a dye of the benzporphin series, II, 390.

- Held, E. F. M. van der, value of $G^2[M]^2$ in the theory of the β -spectra, I, 170.
See also Ornstein, L. S.
- Helderweirt, G., Schievers, and Simonart, A., treatment of extensive burns, III, 418.
- Helferich, B., Dressler, H., and Griebel, R., esters of methanesulphonic acid in the sugar group, II, 468.
- and Günther, E., preparation of iodo-compounds of sterols from sterol alcohols, II, 157, 260.
- Hiltmann, R., and Pigman, W. W., emulsin. XXXVII. Dialysis of emulsin of sweet almonds, III, 787.
- and Lutzmann, H., emulsin. XXXV. Glucosides of phenolcarboxylic acids, their enzymic fission and auto-decomposition, II, 51.
- and Pigman, W. W., emulsin. XXXVI. Enzymic fission of lactose, lactulose, and neolactose. XXXVIII. Carbohydrate content of sweet almond emulsin, III, 99, 787.
- Streeck, R., and Günther, E., preparation of aromatic aldehydes, II, 68.
- Hellauer, H. See Loewi, O.
- Hellbaum, A. A. See Bunde, C. A.
- Hellebrandt, F. A., and Braun, G. L., influence of sex and age on the postural sway of man, III, 542.
- Heller, C. G., and Heller, E. J., gonadotropic hormone: clinical application of extraction methods for assay purposes, III, 474. Gonadotropic hormone in urine of women [at the menopause], III, 480.
See also Lauson, H.
- Heller, E. J. See Heller, C. G.
- Heller, H., p_H and stability of antidiuretic and vasopressor activities of posterior pituitary extracts, III, 974.
- Heller, R. E. See Soskin, S.
- Heller, V. G., and Penquite, R., effect of minerals and fibre on avian intestinal p_H , III, 63.
- Heller, W., structure of non-thixotropic gels of particular hydrophiles, I, 77. Metabolic action of nicotine, III, 1004.
- and Vassy, E., action of alcohol on colloidal systems containing hydrophilic particles, I, 75. Co-existence of reversible and irreversible aggregates in thixotropic gels of hydrophobic particles, I, 260.
See also Centnerszwer, M., and Freundlich, H.
- Hellerman, L. See Porter, C. C.
- Hellman, L. M., and Shettles, L. B., plasma-prothrombin in new-born infant. I. Prematurity and vitamin-K, III, 960.
- Hellmann, H. See Westphal, U.
- Hellström, H., dependence on p_H of dehydrogenations in muscle, III, 421.
See also Euler, H. von.
- Hellström, N., reactivity of the mercaptido-group. V., II, 533.
- Hellwege, K. H., far infra-red investigation of combination vibrations and of the existence of metallic hydrate complexes in crystals, I, 240. Electron vibration spectrum of neodymium salt crystals, I, 508.
- Helmer, O. M., and Fouts, P. J., multiple nature of deficiency of black-tongue-producing diets as shown by studies in rats, III, 75.
- Kohlstaedt, K. G., and Page, I. H., nicotine in human urine; [pressor action of urine], III, 596.
- Helmer, O. M., and Page, I. H., purification and properties of renin, III, 560.
See also Corcoran, A. C., Fouts, P. J., and Kohlstaedt, K. G.
- Helmert, E. See Wagner-Jauregg, T.
- Helmholz, H. F., the pineal gland, III, 683.
- Helmholz, L., crystal structure of neodymium bromate ennehydrate, $Nd(BrO_3)_3 \cdot 9H_2O$, I, 407.
and Rogers, M. T., redetermination of the fluorine-fluorine distance in potassium hydrogen fluoride, I, 600.
- Helmke, K., gliomatosis of the peritoneum in a case of teratoma ovarii, III, 262.
- Helms, A., and Klemm, W., structure of the so-called "alkali tetroxides," I, 303. Crystal structures of rubidium and caesium [mon]oxides, I, 456. Crystal structures of rubidium and caesium sesquioxides, I, 600.
- Helsper, A., influence of prontosil on experimental *B. coli* infection of mice, III, 927.
- Hemingway, A., clearance ratios of sodium ferrocyanide, creatinine, inulin, and xylose in perfused kidney, III, 595.
and Barbour, H. G., thermal tolerance of resting dogs as measured by changes of acid-base equilibrium and dilution concentration effect of plasma, III, 294.
- Hemingway, J. E. See Rastall, R. H.
- Hemmeler, A., use in analysis of reactions by added formaldehyde. I. Detection of acids in presence of known others. II. Quantitative separation of sulphide, sulphate, thiosulphate, and sulphite, I, 96.
- Hemmeler, G., serum-iron and iron therapy, III, 555.
- Hemming, U. See Sihvonen, V.
- Hemmings, A. W. See Rimington, C.
- Hemmingsen, A. M., improvements in accuracy of insulin assay on white mice, III, 681.
- Hemping, W. See Heopke, H.
- Hench, P. S., Bauer, W., Dawson, M. H., Hall, F., Holbrook, W. P., and Key, J. A., rheumatism and arthritis, III, 513.
- Henckel, K. O., and Pantoja, A., development of circumvallate papillae in the pig, III, 956.
- Henderson, A., and McCulloch, W. P., application of constant sulphite solution to the study of the reaction between sulphurous acid and iodic acid, I, 327. Constant sulphite solution, I, 335.
- Henderson, D. N., pelvic endometriosis, III, 583.
- Henderson, G. M., and Rule, H. G., resolving a racemic compound, II, 555.
- Henderson, J. E., and Dahlstrom, R. K., energy distribution in field emission, I, 229.
See also Rubens, S. M.
- Henderson, J. P. See Jones, F. L.
- Henderson, K. See Sollmann, T.
- Henderson, M. C., simple protective device for vacuum systems, I, 161. Heat of fission of uranium, I, 593.
See also Ridenour, L. N., and White, M. G.
- Henderson, V. E., anaesthetic effects of chlorine derivatives of cyclopropane, III, 87. Search for an ideal anaesthetic, III, 313.
and Rice, H. V., action of drugs on respiratory reflexes, III, 863.
- Henderson, W. J., and Doran, R. L., existence of radioactive ^{26}Al , I, 505.
See also Ridenour, L. N., and White, M. G.
- Henderson, W. R., and Wilson, W. C., intraventricular injection of acetylcholine and eserine in man, III, 129.
See also Smyth, G. E.
- Hendrich, G. See Scholder, R.
- Hendricks, B. C., and Rundle, R. E., mutarotation of tetramethyl- α -D-glucopyranose and -mannopyranose, II, 494.
- Hendricks, S. B., polymorphism of the micas and diffuse X-ray scattering of layer silicate lattices, I, 496. Crystal structure of nacrite, $Al_2O_3 \cdot 2SiO_2 \cdot 2H_2O$, and polymorphism of the kaolin minerals, I, 498.
and Jefferson, M. E., crystal structure of vermiculites and mixed vermiculite-chlorites, I, 163. Structures of kaolin and talc-pyrophyllite hydrates, and their bearing on water sorption of the clays, I, 163.
and Ross, C. S., lattice limitation of montmorillonite, I, 343.
and Rundle, R. E., mutarotation of D-galactose, II, 50.
- Hendrickson, A. H. See Veihmeyer, F. J.
- Hendrickson, H. S. See Armstrong, E. L.
- Hendrickx, J., co-ordination of auricular and ventricular activity in molluscs, III, 964.
- Hendrix, B. M., and Dennis, J., changes of nitrogen content brought about by denaturation of proteins, III, 96.
- Hendry, E., blood- and cerebrospinal fluid-sugar and chloride content in meningitis, III, 673.
- Hendry, J. A. See Read, John.
- Henecka, H., synthesis of substances with morphine-like action, II, 82.
- Henglein, E. See Nowotny, H.
- Hengstmann, H., action of water-soluble vitamins on tissue cultures *in vitro*, III, 493.
- Heninger, B. R. See Matas, R.
- Henkin, H., and Taylor, H. A., viscosity and molecular diameter of azomethane, I, 558.
- Henle, G. See Henle, W.
- Henle, W., Henle, G., and Chambers, L. A., antigenic structure of mammalian spermatozoa, III, 52.
- Henley, R. R., improved mantle for bacteria-proof filter candles, III, 105.
- Henne, A. L., and Renoll, (Miss) M. W., fluorinated derivatives of propane. III, II, 491.
Renoll, (Miss) M. W., and Leicester, H. M., aliphatic difluorides, II, 239.
- Henneberg, A., treatment of female gonorrhoea with olobitin, III, 83.
- Hennell, H., and Steinberg, M. F., chemical irritants in tense pneumothorax, III, 662.
- Hennelly, E. F. See Blewett, J. P.
- Hennelly, T. J. See Hawking, F.
- Hennemann, I. P. See Otten, L.
- Hennessy, D. J., and Cerecedo, L. R., determination of free and phosphorylated aneurin by a modified thiochrome method, III, 287.
- Hennig, K., and Ay, H., cataphoresis of wine and brewer's yeasts, III, 99.
- Hennig, N., new gastrocope, III, 985.
- Henning, W., gastric disorders in renal disease, III, 592.
- Hennion, G. F. See Baum, A. A., Norris, R. O., O'Connor, S. F., and Weber, F. C.
- Henny, G. C. See Spiegel-Adolf, M.

- Henri, G., organisation of blood transfusions in war, III, 7.
- Henri, V., and Bergmann, E., ultra-violet absorption spectrum and chemical reactivity of some substituted 9-vinylphenanthrenes, I, 239.
- and Duchesne, J., ultra-violet spectrum of thiophosgene, I, 178.
- and Pickett, (Miss) L. W., ultra-violet absorption spectra of 1:3-cyclohexadiene, I, 448.
- Henrich, L. See Lieser, T.
- Henriques, F. C., jun. See Noyes, W. A., jun.
- Henriques, V., and Ørskov, S. L., magnesium and potassium content of red cells in anaemia, III, 646.
- Henry, A. W., and Campbell, J. A., inactivation of seed-borne plant pathogens in soil, III, 109.
- Henry, B. S. See Ostroff, R.
- Henry, C. See Sterne, J.
- Henry, F. M., audition in the white rat. III. Absolute and relative intensity thresholds, III, 134.
- Henry, K. M., and Kon, S. K., metabolism of calcium and phosphorus, and their availability from milk and an inorganic source, III, 409. Retention of calcium by the rat in presence and absence of vitamin-C, III, 1072.
- See also Foot, A. S.
- Henry, P. S. H., diffusion in absorbing media, I, 466.
- Henry, T. A. See Gibbs, E. M.
- Henry, T. H. See Hartley, G. A. R.
- Henschel, A. F. See King, J. T.
- Henschke, U., experiments with anti-sunburn preparations, III, 95.
- and Schulze, R., erythema and pigmentation experiments as basis for ultra-violet light dosimetry, III, 317. Ultra-violet dosimetry. III. Pigmentation by long-wave ultra-violet radiation. IV. Action of solar radiation on the skin, III, 717, 783.
- Hensel, G., corpus luteum hormone and hair growth, III, 58.
- Henshall, J. H. See Bassett, H.
- Henshaw, P. S., and Francis, D. S., studies with seedlings on wave-length dependence of radiobiological reactions, III, 718.
- Hensler, I., evaluation of right-sided preponderance in the electrocardiogram with Schlomka's index, III, 558.
- Henstock, H., causes of gel formation by organic salts in methyl alcohol solution, I, 259.
- Henvey, L. G., and Greenstein, J. L., theory of the colours of reflexion nebulae, I, 167.
- See also Greenstein, J. L., and Struve, O.
- Henze, C. See Jarisch, A.
- Henze, H. R., keto-ethers. III. β -Halo-genoethoxyethyl alkyl ketone derived from ethylene bromohydrin, II, 6.
- and Rogers, B. G., symmetrical dialkoxyacetones, II, 141.
- See also Allen, B. B., Calaway, P. K., Lingo, S. P., Speer, R. J., and Spurlock, J. J.
- Hepding, L. See Kuhn, R.
- Hepner, B., and Simonberg, A., new group in the diketopyrazolidine series, II, 390.
- Hepp, O., effect of temperature and carbon dioxide tension on colloid osmotic pressure of serum and blood, III, 118. Origin of venous congestion in the legs, III, 563.
- Herb, R. G., Kerst, D. W., Parkinson, D. B., and Plain, G. J., scattering of protons by protons, I, 395.
- Herbert, F. K., fructose-tolerance test, III, 608.
- Herbert, J. B. M., and Blumenthal, E., mechanism of hydrolysis of inorganic esters, I, 623.
- and Lauder, I., oxygen exchange during esterification, I, 92.
- Herbert, R. See Tisdall, F. F.
- Herbert, W. S. See Howe, J. P.
- Herbine, R. H. See Bartlett, K. A.
- Herbo, C. See Juliard, A.
- Herbst, C., determination of sex. VIII. The genes as evocators and nature of presumptive potency, III, 224.
- Herbst, R. M., condensation of α -keto-acids and amides. II. Pyruvic acid and acetamide, II, 138.
- See also Shemin, D.
- Hercik, F., quantitative action of α -rays on plant tissue, III, 514. Action of α -rays on the cell, III, 784.
- and Klusakova, M., effect of space factor in irradiation of a tissue by α -rays, III, 514.
- Herfort, K., effect of vitamin-A on pancreatic secretion, III, 285.
- Hergloz, E., bradycardia of athletes, III, 123.
- Hering, H., and Leray, A., solubility in water of cadmium perchlorate and its hydrates, I, 419.
- Hering, H. W., specific dynamic action of pyruvic acid, III, 294.
- Heringa, G. C., colloid physics and biophysics of proteins, I, 197.
- See also Derksen, J. C.
- Hérissey, H., Poirot, G., and Rabate, J., complex containing protocatechuic acid in the leafy branches of the Portuguese laurel, *Cerasus lusitanica*, L., III, 638.
- Heritsch, H., structure of olivenite, $\text{Cu}(\text{OH})\text{AsO}_4$, I, 12.
- Herkel, W., hydro-therapy of cardiac diseases, III, 613.
- Herken, H., and Rarsi, B., operation and cancer resistance, III, 71.
- See also Brock, N., and Druckrey, H.
- Herlant, M., gonadotropic activity of the pituitary in Addison's disease, III, 47. Gonadotropic activity of pituitary following insulin injections, III, 47.
- Herlemont, R. See Lespagnol, A.
- Herman, A. L. See Goodman, C.
- Herman, J. R. See Rothbard, S.
- Herman, L., absorption spectrum of oxygen, and Herman, (Mme.) R., existence of the phosphorescence of oxygen in the spectrum of the night sky, I, 347.
- Herman, (Mme.) R. See Herman, L.
- Herman, R. C., and Hofstadter, R., vibration spectra and molecular structure. VII. Infra-red studies on the vapours of some carboxylic acids, I, 450, 549.
- See also Sapirstein, M. R., and Williams, I.
- Hermance, H. W. See Clarke, B. L.
- Hermann, C. See Brill, R.
- Hermann, F., occurrence of vanadium in nature, I, 345.
- and Gunther, O., little-known platinum deposits, I, 438.
- Hermann, G. See Solacolu, T.
- Hermann, H., and Delrieu, A., vasoconstrictor action of blood from dogs with hypertension, III, 1032. Effect of 3-piperidomethylbenzodioxan on experimental hypertension produced by section of the carotid sinus nerves, III, 1032.
- Jourdan, F., Morin, G., and Vial, J., hypertensive action of potassium, III, 364. Adrenaline secretion produced by alkaline ions, III, 377. Adrenaline secretion produced by alkaline earths, III, 478. Situation of ganglionic relays in the splenoconstrictor pathway, III, 570. Blood pressure following destruction of stellate ganglia and spinal cord, III, 656. Effect of destruction of spinal cord, stellate ganglia, and vagi in dog, III, 901. Effects of continued, intravenous injection of adrenaline, III, 911. Relation of sympathetic ganglia to splanchnic vasomotor tone, III, 967. Effects of continuous injection of adrenaline in dog following injection of F. 933, III, 977.
- Jourdan, F., and Sedallian, P., survival of spinal centres in the rabbit during ischemia, III, 466. Revival of brain centres in the rabbit following prolonged anaemia, III, 570.
- Morin, G., and Vial, J., peripheral regulation in the dog with spinal cord destroyed. IV. Function of the rectum, bladder, and their sphincters, III, 665.
- Hermann, M. See Hermann, S.
- Hermann, R. N. See Martin, A. R.
- Hermann, S., Hermann, M., Taussig, H., and Zentner, M., action and fate of acids in the organism. II, III, 1006.
- Neiger, R., and Zentner, M., action and fate of acids in the organism. III. Blood-pH and intestinal bacteria, III, 64.
- and Zentner, M., action and fate of acids in the organism. I, III, 1006.
- Hermannsen, J., and Nestmann, hyperinsulinism and adenoma of the pancreas, III, 49.
- Hermano, A. J., and Aguila, P. J., standardisation of tikitiki extract, III, 700.
- Hermans, J. J., orientation of suspended particles in an ultrasonic field, I, 142. Diffusion potentials in electrolytic mixtures. I. The formula of Henderson. II. Concentrated KCl/dilute HCl. III. Theory for small potential gradient; extreme values in the concentrations, I, 147, 148, 267. Influence of an ultrasonic field on the rate of coagulation of negative silver iodide sols by electrolytes, I, 197. Orthokinetic coagulation due to oscillations, I, 197. Calculation of surface viscosity from experimental results, I, 311. Deformation of the double layer by the motion of suspended particles, I, 470. Influence of an alternating electric field on rate of coagulation. I. Negative silver iodide sols. II. Sols of tungstic acid, I, 522. Application of the cage theory of liquids to the problem of ion mobilities, I, 598.
- Hermans, P. H., deformation and fine structure of hydrous cellulose. VI. Tensile strength of fibres and energy involved in the process of rupture, I, 141. Theory of force-extension diagram of hydrous cellulose and its experimental examination, I, 522.

- Hermans, P. H., and De Booy, J., deformation and fine structure of hydrous cellulose. X. "Kratky's chain" as quantitative model for the mechanism of deformation of hydrous cellulose gels, I, 470.
- De Booy, J. and Vermaas, D., deformation and fine structure of hydrous cellulose. V. "Mechanical properties" of hydrous cellulose, I, 141.
- Kratky, O., and Platzek, P., deformation of fibrous substances. VII. Net structure of swollen cellulose hydrate, I, 186.
- and Platzek, P., deformation and fine structure of hydrous cellulose. VIII. Relation between anisotropy of swelling and mechanism of deformation in hydrocellulose gels. IX. Theoretical relation between anisotropy of swelling and double refraction of oriented fibres, I, 418, 470.
- Herner, M. C., relative vitamin-A content of three varieties of Northwestern dent maize; Manitoba-grown red and yellow and American yellow [varieties], III, 850.
- Hernler, F., and Pfeningberger, R., microhalogen determination; fluorine and chlorine, I, 214. Electro-analysis with small amounts of substance. II. Determination of silver, I, 216.
- Herocovici, H., mechanism of puberty, III, 979.
- Herold, L., effect of trans-section of pituitary stalk on lactation, III, 678. Function of liver in normal pregnancy and hyperemesis gravidarum, III, 687.
- and Effkemann, G., action of follicular hormone on the breast after dividing pituitary stalk, III, 685.
- Herr, B. S. See Cutler, J. W.
- Herrald, F. J. C., and McMichael, J., determination of lung volume: simple constant-volume modification of Christie's method, III, 461.
- Herre, W., and Rawiel, F., implantation of pituitary glands into larvae of various species of triton. I. Effect on sex organs, III, 905.
- See also Abderhalden, E.
- Herrell, W. E., and Brown, A. E., clinical use of neoprontosil (oral), III, 302.
- and Cusick, P. L., vascular and retinal abnormalities following inhalation of tobacco smoke, III, 91.
- See also Brown, Alex. E.
- Herren, R. Y., calcified plaques in spinal arachnoid, III, 833.
- Herrenberger, K., and Horstmann, F. H., action of follicle hormone on glycogen content of vaginal epithelium in children, III, 685.
- Herrick, C. A. See Holmes, C. E.
- Herrick, C. R., jun. See Rakestraw, N. W.
- Herrick, H. T. See Moyer, A. J.
- Herrick, J. F., Mann, F. C., Essex, H. E., and Baldes, E. J., visualisation of intrathoracic vena cava: effect of respiration on diameter of the vessel, III, 237.
- Mann, F. C., and Sheehan, H. L., influence of phenol-red and creatinine on renal blood flow, III, 713.
- See also Essex, H. E., and Mann, F. C.
- Herrick, W. W., vascular and renal complications of pregnancy, III, 266.
- Herrin, H. S. See Hammersland, H. L.
- Herrin, R. C., and Nicholes, H. J., influence of vitamin-A on urea and inulin clearance in the dog, III, 760.
- Herring, (Miss) E. See Ginnings, P. M.
- Herrington, L. P., and Moriyama, I. M., relation of mortality from metabolic diseases to climatic and socio-economic factors, III, 192. Relation of mortality from respiratory diseases to climatic and socio-economic factors, III, 620.
- See also Gage, A. P., Moriyama, I. M., and Winslow, C. E. A.
- Herriott, R. M. See Desreux, V.
- Herrmann, C. L. See Bodansky, M.
- Herrmann, G., changes of S-T and T waves of the electrocardiogram during the day, III, 235.
- and Decherd, G. M., chemical nature of heart failure, III, 360.
- Herrmann, Georges, defence enzyme reaction in the study of the effect of ultraviolet and X-rays on man, III, 193.
- Herrmann, H., fixation of reagents by tissues, III, 890.
- Herrmann, Heinz (Copenhagen), reaction of metaphosphoric acid with basic triphenylmethane dyes, I, 38.
- and Fischer, Albert, acceleration of "tryptic haemolysis" by embryonic extract, III, 654.
- Herrmann, Heinz (Frankfurt). See Jander, W.
- Herrmann, Paul, apparatus for automatic cleaning of laboratory vessels, I, 161.
- Herrmann, R. See Brigl, P.
- Herrmann, W., modification of the Clauberg III (indicator) nutrient medium for the diagnosis of diphtheria, III, 1100.
- Herrmann-Gurfinkel, (Mme.) M., analytical applications of dimine (cyclohexylethylamine dithiocarbamate), I, 430.
- Herrmannsen, J. See Dietel, H.
- Herrnberger, K., optimal dose of follicle hormone in treatment of gonorrheal vaginitis of children, III, 145.
- Hershberg, E. B., and Southworth, L., needle valve for the micro-Dumas determination of nitrogen, I, 493.
- and Weiner, N., glass liner for high-pressure hydrogenation bomb, I, 224.
- See also Fieser, L. F.
- Hershey, A. D., factors limiting bacterial growth. VI. Equations describing the early periods of increase, III, 1015.
- Hershey, A. V., ridges in a liquid surface due to the temperature dependence of surface tension, I, 512.
- Hertel, E., and Lenz, A., cathodic reduction of aromatic nitroso-compounds below the hydrogen deposition potential, I, 378.
- and Lübrmann, H., internal and external field action of substituents on methyl donors and acceptors, I, 376.
- and Schinzel, M., chromoisomerism of diphenylamine derivatives, II, 363.
- Hertel, H., and Arnold, L., ascorbic acid content of serum and urine in health and disease, III, 496.
- Hertwig, G., growth of cell nuclei by doubling, III, 445.
- Hertwig, P., regeneration of mouse spermatogonia after irradiation, III, 481.
- Hertz, J., case of double auricular action with one-sided block, III, 1030.
- Hertz, M., colour vision in bees, III, 1043.
- Hertz, R., and Meyer, R. K., effect of surgical reduction of reacting tissue on quantitative effectiveness of testosterone propionate and œstrone, III, 268.
- Hertz, R. See also Kupperman, H. S.
- Hertz, S. See Castleman, B.
- Hertzman, A. B., blood supply of various skin areas as estimated by the photoelectric plethysmograph, III, 238. Photoelectric recording of the pulse and of other oscillatory movements with the electrocardiograph, III, 361.
- Hertzog, A. J., phagocytic activity of human leucocytes with special reference to their type and maturity, III, 4.
- Herwick, R. P., Linegar, C. R., and Koppanyi, T., effect of anaesthesia on the vasomotor reversal, III, 505.
- See also Linegar, C. R.
- Herz, R., photo-cells in X-ray technology, I, 581.
- Herzberg, G., interpretation of molecular spectra and study of molecular spectra in celestial objects. II. Forbidden transitions in diatomic molecules. III. Dissociation, predissociation, and recombination of diatomic molecules, I, 354.
- Herzfeld, E., Tyndall- and fluorescence-photometric measurements for determination of small quantities of material, I, 98. Two new specific reactions for cerium, I, 219.
- Herzfeld, K. F., and Teller, E., vapour pressure of isotopes, I, 67.
- See also Lyddane, R. H., and Rice, F. O.
- Herzog, A., posterior pituitary hormones and retention of salt and water following insulin administration, III, 678.
- and Hornisch, H., experiences with depot insulin, III, 910.
- Herzog, E., pigments and secretion of chemical transmitter in sympathetic ganglia, III, 471.
- Herzog, F., and Kleiner, G., dietary treatment of polycythæmia, III, 646.
- Herzog, G., search for heavy cosmic-ray particles with a cloud chamber, I, 445.
- Hes, J. W., influence of carbonic acid on heterotrophic micro-organisms, III, 427.
- Heslop, T. S., hypothalamus and gastric motility, III, 667.
- See also Maycock, W. d'A.
- Hess, E. See Frei, W.
- Hess, H. H., world distribution of serpentinised peridotites and its geologic significance, I, 496.
- Hess, K., and Frahm, H., preparation and properties of pure dioxan, II, 84.
- and Heumann, K. E., synthetic sugar anhydrides. IX. Further anhydride from 2:3:6-trimethylglucose, II, 98. Sterically homogeneous forms of 2:3:6-trimethylmethyl-d-glucosuranoside and its derivatives, II, 99. Elucidation of the configuration at the glucosidic carbon atom in sugars by formation of ammonium salts, II, 468.
- Kiessig, H., Wergin, W., and Engel, Werner, formation of cellulose in the cell wall, III, 537.
- Philippoff, W., and Kiessig, H., viscosity and density measurements and X-ray studies of soap solutions, I, 469.
- See also Sobue, H.
- Hess, W. See Flatt, R.
- Hess, W. C., and Sullivan, M. X., cystine content of deaminised proteins, II, 350.
- Hess, W. N., and Root, C. W., [islets of] pancreas of white rats of different age groups, III, 680.
- Hesse, E., silicon and the cholesterol arteriosclerosis of the rabbit, III, 659.
- See also Weibke, F.

- Hesse, G., Reicheneder, F., and Eysenbach, H., African arrow poisons. II. Heart poisons in *Calotropis* sap, II, 81.
- Hesse, H., hæmoglobin determination without dilution, III, 352.
- Hessel, G., renin and pathogenesis of renal hypertension, III, 23.
- Hesseltine, H. C. See Adair, F. L.
- Hesseltine, L., electrophoretic investigation on proteins of eye lens and vitreous body, III, 836. Electrophoretic study of normal and pathological body-fluids, III, 1061.
- Hesser, F. H. See Langworthy, O. R.
- Hesser, S., relapsing gastric hæmorrhages and their treatment, III, 592.
- Hessler, L. E. See Ergle, D. R.
- Hester, H. R. See Flock, E. F.
- Hestrin, S. See Leibowitz, J.
- Hetland, E. See Frivold, O. E.
- Hett, J., and Maak, H., benzene and gonads, III, 91.
- Hett, O., contracture of skeletal muscle induced by acid, III, 747.
- Hettche, H. O., quartamon, a new disinfectant, III, 307.
- and Münch, H., silicate media for water and sewage investigations, III, 880.
- Heubner, W., enteral absorption of iron, III, 691.
- and Albath, W., antiphlogistic action of purified azulene from *Matricaria chamomilla*, L., III, 936.
- and Brockmeier, J., distribution of doses in assay of œstrone, III, 755.
- and Möbus, H., alcohol and formation of methæmoglobin, III, 9.
- and Runcan, V., choline ester [present] in frog's hearts without vagus stimulation, III, 657.
- and Schreiber, E., cell stimulation in tissue cultures, III, 192. Permeability of cell membrane to hydrocyanic acid, III, 813.
- and Yu-Dschau, L., pharmacology of tea, III, 185.
- See also Havemann, R.
- Heuer, G. J. See Stewart, H. J.
- Heuer, W. W. See Leslie, R. T.
- Heumann, K. E. See Hess, K.
- Heupke, W., and Hauer, L., digestion of uncooked starch, III, 299.
- and Schülein, F., digestion in the small intestine of man, III, 64.
- Heuse, E., transformation of impulse voltages; observations of the scattering of electrons with the cloud chamber, I, 544.
- Heuser, G. F. See Bauernfeind, J. C., Davis, H. J., and Wilgus, H. S., jun.
- Heuser, H. See Meltzer, H.
- Heusner, A. See Butenandt, A.
- Hevér, D. B. See Helberger, J. H.
- Hevesy, G., and Levi, H., action of neutrons on rare-earth elements, I, 232.
- See also Aten, A. H. W.
- Hevesy, G. C., Levi, H. B., and Rebbe, O. H., origin of phosphorus compounds in the chick embryo, III, 146.
- See also Hahn, L. A.
- Hewell, B. A., and Mitchell, A. G., treatment of pneumococcal meningitis with sulphanilamide, III, 774.
- Hewer, C. L., sodium ethylisoamylthio-barbiturate as a basal narcotic, III, 313.
- and Bellfrage, D., trichloroethanol as basal narcotic, III, 185.
- Hewer, H. R. See Sladden, D. E.
- Hewett, C. L. See Cook, James W.
- Hewett, D. F. See Miser, H. D.
- Hewitt, L. F., polysaccharide complex of serum proteins; effect of pepsin on serum-protein fractions, III, 962.
- and Todd, E. W., effect of cholesterol and sera contaminated with bacteria on hæmolysins produced by hæmolytic streptococci, III, 876.
- Hewitt, R., experimental erythroblastosis in canaries and its effect on infections with *Plasmodium cathemerium*, III, 791. Staining technique for demonstrating avian malarial parasites in tissue sections, III, 791.
- Hewston, E. M. See Booher, L. E.
- Hey, D. H. See Ellison, H., France, H., and Gillam, A. E.
- Hey, M. H., history of "Widmanstätten" structure, I, 437. Presentation of chemical analyses of minerals, I, 584.
- See also Sandell, E. B.
- Heydecke, K. H., action of doryl and acetylcholine in epilepsy, III, 971.
- Heydrich, B., poisoning with sodium silicofluoride, III, 510.
- Heyes, J. See Thanheiser, G.
- Heyl, E., blood changes in hæmophilia, III, 893.
- See also Buchmann, P.
- Heyman, E., and Kerley, L. F., simple micro-test for copper, I, 488.
- Heymann, E. See Docking, A. R.
- Heymann, G. See Hédon, L.
- Heymans, C., pressoreceptive mechanisms for the regulation of heart rate, vasomotor tone, blood pressure, and blood supply, III, 362. Experimental arterial hypertension, III, 365. Role of cardioaortic and carotid-sinus nerves in the reflex control of the respiratory centre, III, 366. Aspects of blood pressure regulation and experimental arterial hypertension, III, 658.
- and Bouckaert, J. J., vasoconstrictor properties in blood of hypertensive dogs, III, 23. Chemoreceptors of the carotid sinus, III, 366.
- Delaunois, A. L., and De Moerloose, J., continuous and total determination of the metabolism of a non-anæsthetised animal, III, 804.
- See also Bacq, Z. M., and Bouckaert, J. J.
- Heyn, F. A., Aten, A. H. W., jun., and Bakker, C. J., transmutation of uranium and thorium by neutrons, I, 234.
- See also Aten, A. H. W., jun.
- Heyns, K., determination of vitamin-B₁ by the fermentation method, III, 703.
- Heywood, B. J., Kon, G. A. R., and Ware, L. L., sapogenins. V. Basic acid, II, 436.
- Hiatt, N., and Goldberg, S. L., hæmolytic streptococcus (beta) septicæmia following a burn; pooled human convalescent scarlet fever serum therapy, III, 710.
- Hibben, J. H., statistical analysis of trends in research on the Raman effect, I, 119. Constitution of boric oxide compounds, I, 179.
- Hibbert, H., lignin and related compounds. XXXVII. Structure of lignin and nature of plant synthesis, II, 221.
- See also Brickman, L., Cramer, A. B., Fordyce, R., Hunter, M. J., Lieff, M., Lovell, E. L., Peniston, Q. P., Pyle, J. J., Steeves, W. H., and West, E.
- Hiby, J. W., mass-spectrographic investigation of hydrogen and helium canal rays (H_2^+ , H_2^- , HeH^+ , HeD^+ , He^-), I, 230.
- Hickey, J. H. See Shriner, R. L.
- Hickinbottom, W. J., mechanism of rearrangement of phenyl ethers, II, 59. Demonstration of participation of free radicals in rearrangement of phenyl benzyl ether, II, 258.
- and Lambert, E. W., reactivity of the aromatic nucleus. I. Karrer's theory of coupling, II, 501.
- Hickling, A., and Westwood, J. V., electrolytic oxidation. XI. Electrolysis of acid-ester salts in non-aqueous solutions, and the mechanism of the Crum-Brown-Walker synthesis, I, 480.
- See also Glasstone, S.
- Hickling, C. F., distribution of phosphates in the south-western area in April 1938, I, 106.
- Hickman, K. C. D. See Bills, C. E.
- Hicks, J. F. G., jun., and Hooley, J. G., heat capacity of potassium sodium tartrate tetrahydrate from 15° to 340° K., I, 67.
- Hickson, J. L. See Fuson, R. C.
- Hidden, E. H. See Ashman, R.
- Hieber, G. See Wentrup, H.
- Hieber, W., and Feder, E. E., heats of formation of cuprous and mercurous halide compounds with amines, I, 82.
- and Marin, R., nitric oxide compounds of cobalt (I) halides, I, 212.
- Schulten, H., and Marin, R., metallic carbonyls. XXVIII. High-pressure synthesis of cobalt carbonyl and cobalt carbonyl hydride from cobalt compounds, I, 212.
- Hiedemann, E., physicochemical action of ultrasonic waves, I, 75. Elastic constants of transparent isotropic solids by a new method, I, 187.
- and Osterhammel, K., isochromatic investigation of sound amplitude fields, I, 132.
- Higasi, K., and Uyeyo, S., molecular configuration of diphenyl ether by dipole moment data, I, 356.
- Higasi, T., Mayeda, S., and Matsuoka, H., detection of α -amino- β -hydroxybutyric acid and its distribution in various proteins, II, 195.
- Higbee, W. E. See Stevens, P. G.
- Higby, R. H., bitter constituents of navel and Valencia oranges, III, 343.
- Higgins, C. C., and Shiveley, F. L., Wilms' tumour (adenomysarcoma) of kidney in children, III, 1060.
- Higgins, G. M., and Ingle, D. J., effect of administration of carbon tetrachloride on extent of regeneration in the enucleated adrenal gland of the rat, III, 43. Regeneration of the liver in hypophysectomised white rats, III, 576.
- See also Briese, E., Ingle, D. J., Machella, T. E., and Staszey, J.
- Higgins, H. L. See Burgin, L. B.
- Higgins, R. W., and Suter, C. M., synthesis of iodinated benzoylbenzoic acids and anthraquinones, II, 554.
- Higberger, J. H., isoelectric point of collagen, I, 563.
- and Kersten, H. J., similarity of the X-ray patterns of tanned and mechanically deformed collagen fibres, III, 869.
- Highman, W. J., jun., and Hamilton, B., hyperparathyroidism secondary to experimental renal insufficiency, III, 41.
- Higounet, H. See Letulle, R.

- Higuti, I., sorption of gases and vapours by titania gel. V. Variation in sorptive capacity of titania gel by addition of Fe_2O_3 gel and difference between sorptive capacities of α - and β -titania gels. VI. Sorption and desorption equilibria of organic vapours and critical limit of capillary condensation phenomena, I, 254, 561.
- Hijikata, K. See Ishikawa, F.
- Hildebrand, E., histogenesis of experimental pavement epithelium cancer, III, 779. See also Lauber, H. J.
- Hildebrand, G. B. See Getz, H. R.
- Hildebrand, J. H., liquid state and energy of vaporisation, I, 133. Solutions of non-polar substances, I, 138. Liquid structure and entropy of vaporisation, I, 310. Order and disorder in pure liquids and solutions, I, 511.
- and Sweny, J. W., entropy of solution of hexane with hexadecane, I, 266. See also Frederick, K. J.
- Hildebrand, W. See Serini, A.
- Hildebrandt, A., vitamin-E, excretion, III, 602. Action of vitamin-B₁ in polyneuritis gravidarum, III, 850.
- Hildebrandt, F., short waves and vasodilator substances, III, 96.
- and Osterwald, K. H., strophanthin and coronary flow, III, 182.
- Hilditch, T. P., Lea, C. H., and Pedelt, Y. H., influence of low and high planes of nutrition on composition and synthesis of fat in the pig, III, 500. See also Gunde, B. G.
- Hilgenberg, H. See Schultz, W.
- Hilgermann, R., chemotherapy of tuberculosis with formic acid, III, 781.
- Hill, Alfred. See Thermo-Tanks, Ltd.
- Hill, Athelstane, analysis of the normal QRS deflexion, III, 17. Analysis of normal P wave, III, 1030.
- Hill, A. G., Buechner, W. W., Clark, J. S., and Fisk, J. B., emission of secondary electrons under high-energy positive-ion bombardment, I, 230.
- Hill, A. H., foetal age assessment by centres of ossification, III, 641.
- Hill, A. J., and Aspinall, S. R., preparation and cyclisation of monoacylethylenediamines, II, 247.
- Hill, A. V., heat of shortening and the dynamic constants of muscle, III, 26. Transformations of energy and mechanical work of muscles, III, 367. See also Downing, A. C.
- Hill, B. P., hypersusceptibility to basal anaesthetics, III, 313.
- Hill, D., Bulgarian belladonna in treatment of post-encephalitic Parkinsonism, III, 84.
- Hill, D. B., thrombopenic purpura following allylisopropylacetylcarbamide (sedormid), III, 231.
- Hill, D. K., differential volumetric method for time-course of oxygen usage by stimulated frog's muscle, III, 748.
- Hill, E. L., calculation of phase shifts in scattering problems [in quantum mechanics], I, 57.
- and Haxby, R. O., disintegration of boron by protons, I, 172.
- Hill, Fr., lupin flour-agar for cultivation of diphtheria bacilli, III, 203.
- Hill, J. See Briggs, G.
- Hill, J. M., dimensions of the red cells in familial haemolytic anaemia, III, 228.
- Hill, L., infra-red rays and the skin, III, 717.
- Hill, L. F., and Kelly, D. H., tuberculosis in children, III, 877.
- Hill, L. M., and Orton, C. R., microchemistry of potato tubers affected with "blue stem," III, 438.
- Hill, M., and Maycock, W. d'A., effect of stimulation of cervical sympathetic nerve and superior cervical sympathetic ganglion on blood-sugar, III, 570.
- Hill, R. See Vidgoff, B.
- Hill, Robert, oxygen produced by isolated chloroplasts, III, 731.
- and Bhagvat, K., cytochrome oxidase in flowering plants, III, 785.
- Hill, Rowland, Lewis, J. R., and Simonsen, J. L., butadiene co-polymerides: elucidation of structure by ozonolysis, II, 466. Butadiene polymerides: elucidation of structure by ozonolysis, II, 466.
- Hill, R. D. See Goldhaber, M., and Good, W. E.
- Hill, S. E. See Osterhout, W. J. V.
- Hill, S. G. See Griffith, R. H.
- Hill, T. G. See Haas, P.
- Hill, W. C. O., giant Sumatran orang, III, 544.
- Hillary, B. B., permanent preparations from rapid cytological techniques, III, 1. Improvements in permanent root tip squash technique, III, 890.
- Hille, E. See Alten, F.
- Hillel, R. See Späth, E.
- Hillemand, P. See Brnlé, M.
- Hiller, J. E., X-ray methods of determination and investigation of lead stibnites, I, 288.
- Hilles, C., and Schmidt, L. H., sulphanilamidopyridine [M. & B. 693] in experimental infections with type XXII pneumococcus, III, 858. See also Schmidt, L. H.
- Hillier, J., effect of chromatic error on electron-microscope image, I, 433. See also Prebns, A.
- Hills, C. H., and Vinson, C. G., particle size of tobacco mosaic virus, III, 530.
- Hills, E. S., andalusite and sillimanite in uncontaminated igneous rocks, I, 47.
- Hills, N. G. See Earl, J. C.
- Hillson, S. P. See Chalklin, F. C.
- Hilly, G. See Paul, R.
- Hilpert, R. S., Hoffmann, Alex, and Huch, F. H., sodium, lithium, and copper ferrites, and their conversion into nitrides, I, 334.
- and Knackstedt, W., composition of the cell wall of plants. II. Bast fibres of tree barks, III, 950.
- and Krüger, Werner, shells of the seeds of plants, III, 439.
- Krüger, Werner, and Hechler, G., action of nitric acid on wood; chemistry of lignin, II, 331.
- Maier, K. H., and Hoffmann, Alex, sulphomagnetite, I, 93. New ferromagnetic ferric oxides [formed] by hydrolysis of basic ferric chloride, I, 93.
- and Pfützenreuter, J., action of ethylenediamine-copper oxide solution on wood and straw, II, 221. Characterisation of the plant cell wall by treatment with copper oxide-ammonia solution, III, 109.
- Hilsch, R., electronic conduction in crystals, I, 452.
- and Pohl, R. W., distribution of an electron stream with a three-electrode crystal, and a model of a barrier layer, I, 126. Quantitative treatment of photo-electric primary and secondary currents, I, 302. Nature of U-centres in alkali halide crystals, I, 554.
- Hiltmann, R. See Heflerich, B.
- Himel, C. M. See Marvel, C. S.
- Himmel, F. See Flaks, J.
- Himmelreich, E. V., influence of avitaminosis-C on the tissue enzymes (cathepsin, lipase) of animals. I. Cathepsin. II. Lipase, III, 99.
- Himsworth, H. P., mechanism of diabetes mellitus, III, 1077.
- and Kerr, R. B., insulin and alimentary hyperglycaemia in young normal subjects, III, 909.
- Himwich, H. E., Alexander, F. A. D., and Lipetz, B., effect of acute anoxia produced by breathing nitrogen on the course of schizophrenia, III, 248.
- Baker, Z., and Fazekas, J. F., respiratory metabolism of infant brain, III, 770.
- Fazekas, J. F., Bernstein, A. O., Campbell, E. H., and Martin, S. J., syndromes secondary to prolonged hypoglycaemia, III, 233.
- Fazekas, J. F., and Martin, S. J., effect of bilateral ligation of the lumbodrenal veins on the course of pancreatic diabetes, III, 261.
- Frostig, J. P., Fazekas, J. F., Hoagland, H., and Haddidan, Z., clinical, electroencephalographic, and biochemical changes during insulin hypoglycaemia, III, 970.
- Haddidan, Z., Fazekas, J. F., and Hoagland, H., cerebral metabolism and electrical activity during insulin hypoglycaemia in man, III, 672.
- Martin, S. J., Alexander, F. A. D., and Fazekas, J. F., electrocardiographic changes during hypoglycaemia and anoxaemia, III, 559.
- Hinchey, V. M., relation between frond transpiration and yield of sap in the nipah palm (*Nipah fruticans*), III, 211.
- Hind, H. G. See Macrae, T. F.
- Hindemith, H., action of caffeine on gaseous exchange, III, 187.
- Hindhaugh, W. L. S. See Dudley, F. J.
- Hindley, A., heating and ventilating systems for physical comfort, III, 620.
- Hinos, E. A., jun., technique of the cold pressor test, III, 562.
- Hines, H. J. G. See Williams, C. H.
- Hinkel, L. E., constitution of the tetrapolymeride of hydrogen cyanide, II, 205.
- Ayling, E. E., and Walters, T. M., determination of the nitro-group, II, 235.
- Hinman, F. See Reilly, W. A.
- Hinsberg, K., excretion of cardiazol, III, 615.
- Albers, D., Merten, R., Mucke, K., and Rodewald, W., diagnostic value of biologic-chemical carcinoma-reactions. I.—V., III, 282.
- and Lahn, G., effect of porphyrin, cholate, phosphate, and citrate on the autoxidation of linoleic acid in buffer solution, I, 328.
- and Merten, R., combined blood-sugar in disease, III, 357. Effect of porphyrin on the metabolism of warm-blooded animals. I and II, III, 498, 926.
- and Nowakowski, H., autoxidation of linoleic acid in presence of porphyrins, I, 328.
- and Rodewald, W., effect of porphyrin on secretion of melanophoric hormone by the pituitary, III, 379. See also Merten, R.
- Hinsey, J. C., and Markee, J. E., reflexes in the spinal monkey, III, 370.

- Hinshaw, H. C., experimental production of chronic obstructive pulmonary emphysema in animals, III, 240.
See also Feldman, W. H.
- Hinshaw, W. R. See Dickinson, E. M.
- Hinshelwood, C. N., nature of catalysts, I, 477.
See also Dagley, S., Davoud, J. G., Fairclough, R. A., Hobbs, J. E., Lewis, R. M., Raine, H. C., Staveley, L. A. K., Tommila, E., and Vicary, D. R.
- Hintze, H., and Zollenkopf, H., experimental restoration of blood flow by thrombectomy, III, 458.
- Hintzsche, E., and Anderegg, P., cells of Paneth in mammals and their biological significance, III, 270.
- Hinz, H., elastic deformation of Rochelle salt, I, 187.
- Hippel, A. von, electronic conduction in insulating crystals under very high field strength, I, 127.
- Hipple, J. A., jun. See Delfosse, J.
- Hipple, J. S. See Eyster, J. A. E.
- Hirai, I. See Boku, S.
- Hirai, K., production of cadaverine from *d*-lysine by *Bacillus lactis aerogenes*, III, 1011.
- Hiraiwa, M. See Asahina, Y.
- Hiramoto, M., maesaquinone, a pigment from the fruits of *Maesa japonica*, II, 512.
- Hirano, Shiro. See Ogata, A.
- Hirano, T. See Sato, Masakazu, and Wada, Masao.
- Hirao, S. See Kasahara, M.
- Hirasawa, K., and Okano, S., connexions of cortex with thalamus in the rabbit, III, 467.
Okano, S., and Kamio, S., cortical extra-pyramidal fibres from superior temporal area (area 22) in the ape, III, 247.
- Hirata, K., localisation of brain lesions and their influence on gastric mucosa and movements. I. Effect of lesions produced by foreign bodies in the brain. II. Injuries limited to the hypothalamus, III, 571.
- Hirohata, S., muscle atrophy. I. Decrease of weight in muscle atrophy, III, 463.
- Hirone, T., and Hori, N., thermo-magnetic and related properties of metals, I, 461.
See also Honda, K., and Okamura, T.
- Hirose, S. See Yaoi, H.
- Hirota, K., and Horiuti, J., classical statistical mechanical formulation of the absolute rate of reaction in a general chemical system, I, 29. Electrical phenomenon of a palladium filament occluding hydrogen, I, 309.
- Hirotsu, T. See Funakubo, E.
- Hirsch, A. A., auxiliary sliding scale for burettes, I, 581.
- Hirsch, E. F., arterial occlusion with bone necrosis, III, 238. Experimental tissue lesions with mixtures of human fat, fatty acids, soaps, and cholesterol, III, 780.
- Hirsch, W., and Kaatz, A., case of diabetes insipidus, III, 1048.
- Hirsch-Hoffmann, H. U., hormone therapy in gynaecology, III, 756.
- Hirschberg, N., types of *Corynebacterium diphtheriae*, III, 330. Phagocytic activity in leukemia, III, 813.
- Hirschbold-Wittner, F. See Honigschmid, H.
- Hirschfelder, A. D., and Haury, V. G., variations in magnesium and potassium associated with essential epilepsy, III, 250.
- Hirschfelder, J. O., energy of the triatomic hydrogen molecule and ion. V., I, 63. and Roseveare, W. E., intermolecular forces and the properties of gases, I, 134.
- Stevenson, D., and Eyring, H., theory of liquid structure, I, 304.
- and Taylor, H. S., α -particle reactions in carbon monoxide, oxygen, and carbon dioxide systems, I, 90.
- and Weygandt, C. M., integrals required for computing the energy of H_2 and of H_2^+ , I, 63.
- and Wigner, E., quantum-mechanical considerations in the theory of reactions involving an activation energy, I, 568.
- Hirschlaff, C., auto-anastomoses in peripheral cerebrospinal nerves, III, 28.
- Hirschlaff, E. See Evans, C. H.
- Hirschmann, F. See Bergmann, Werner.
- Hirschmann, H., androgens from urine of ovariectomised women, III, 1052. and Wintersteiner, O., isoequilin-A, II, 76.
- Hirsh, F. R., jun., and Du Mond, J. W. M., X-ray evidence by Cauchois spectrograph on the nature of the surface layers of thin ground quartz crystals, I, 64.
- Hirshberg, Y. See Bergmann, E., and Weizmann, C.
- Hirsheimer, A., January, D. A., and Daversa, J. J., X-ray study of gastric function during labour, III, 387.
See also Thomson, K. J.
- Hirsiarvi, V. P., 2:2:5-trimethylcyclohexane-1:3-diol and its dehydration product, II, 211.
See also Toivonen, N. J.
- Hirst, E. L., and Jones, J. K. N., pectic substances. II. Isolation of an araban from the carbohydrate constituents of pea-nut. III. Composition of apple pectin and molecular structure of the araban component, II, 203. Constitution of damson gum. II. Hydrolysis products from methylated degraded (arabinose-free) damson gum, II, 495.
- Jones, J. K. N., and Jones, (Miss) W. O., structure of alginic acid, II, 405. and Young, G. T., polysaccharides. XXXI. Constitution of wheat starch and horse-chestnut starch. XXXII. Molecular constitution of rice starch, II, 358, 495.
See also Campbell, W. G., Gill, R. E., and Hawkins, E. G. E.
- Hirst, G. K., and Lancefield, R. C., antigenic properties of the type-specific substance derived from group A hemolytic streptococci, III, 631.
- Hirst, W., and Harrison, G. E., diffusion of radon gas mixtures, I, 249.
- Hirszfeld, L., and Kostuch, Z., nature of blood group O, III, 451. Blood subgroups and their inheritance, III, 649.
- Hirt, A., Ansorge, J., and Markstrahler, H., luminescent microscopic investigations on the liver (*in vitro*) of frog and rat; secretion of fluorescein and trypanflavin, III, 271.
- and Wimmer, K., luminescence of nicotinic acid and its amide in living organism, III, 767. Luminescence of vitamins in living organism, III, 767.
- Hirtle, D. S. See Smith, Rodney P.
- Hirwe, N. W., Jadhav, G. V., and Sukhtankar, D. R., preparation of *o*-tolu-, *o*-chlorobenz-, and *o*-anis-arylamides, II, 263. Interaction of sulphuryl chloride with arylamides of aromatic acids. II. Orienting influences of groups in substitution reactions in aromatic compounds, II, 547.
- and Rana, K. N., chloral-amides. V. Reactivity of hydroxyl groups in chlorosalicyl- $\beta\beta\beta$ -trichloro- α -hydroxyethylamides. II, II, 264. Chloral-chlorosalicylamides and their methyl ethers, II, 423.
- Rana, K. N., and Gavankar, K. D., derivatives of salicylic acid. XIII. Chlorosalicylic acids and their methyl ethers, II, 20.
- Hisamura, H., biochemistry of carbohydrates. XXXVII. Carbohydrate moiety of chondromucoid. XXXIX. Carbohydrates of osseomucoid, III, 156, 394.
- Hisaw, F. L. See Greep, R. O.
- Hishida, Y. See Tsuji, S.
- Hiskey, C. F. See Hurd, L. C.
- Hitani, S., mechanism of phenolphthalein as purgative, III, 613. Effect of morphine on the urinary bladder, III, 614.
- Hitchcock, A. E. See Zimmerman, P. W.
- Hitchcock, D. I., and Taylor, A. C., standardisation of p_H . II. Standardisation of the p_H scale at 38°, I, 24.
- Hitchcock, F. A., and Ferguson, J. K. W., respiratory and circulatory adjustments to the erect posture, III, 240.
- Hitchcock, P. See Mason, E. C.
- Hitchings, G. H. See Cleary, R. V., and Subbarow, Y.
- Hjerting, F., tables facilitating calculation of line absorption coefficients, I, 167.
- Hjort, A. M., De Beer, E. J., and Fassett, D. W., tetrahydroxyquinolines. III. Relative antianæsthetic effects, III, 187. Effect of the diet on anæsthetic qualities of hypnotics, III, 313. Relative hypnotic potencies and lethal values of the eight amyleria position isomerides and of the corresponding 5:5-diethyl-1-amylobarbituric acids, III, 714.
See also De Beer, E. J.
- Hjorth, P., X-lysine, a thermostable bacteriolysin, III, 1107.
- Hjorth-Hansen, S., growth of yeast in synthetic medium at constant p_H , III, 789.
- Hlasko, M., and Michalski, E., conductivity of hydrogen halides in anhydrous acetic and propionic acids, I, 28.
- and Salitowna, A., conductivity of aqueous solutions of the difficultly soluble hydroxides $\text{Be}(\text{OH})_2$, $\text{Mg}(\text{OH})_2$, $\text{Zn}(\text{OH})_2$, $\text{Cd}(\text{OH})_2$, and $\text{Hg}(\text{OH})_2$, I, 525.
- Hlučka, F., quantum equivalent of the primary current of the inner photo-effect, I, 452.
- Hnevkovsky, O. See Hüttig, G. F.
- Ho, I. D., and Sawyer, R. A., extension of the γ I and γ II spectra, I, 49.
- Hoag, J. B., and Gottlieb, N., inner initial permeability of iron and nickel for 98—410 Mcycles, I, 246.
- Hoagland, C. L., Beeson, P. B., and Goebel, W. F., capsular polysaccharide of the type XIV pneumococcus and its relationship to the specific substances of human blood, III, 204.
- and Fischer, D. J., micro-determinations of serum-proteins by gasometric carbon analysis, III, 1029.
See also Goebel, W. F., and MacLeod, C. M.

- Hoagland, D. R., and Steward, F. C., metabolism and salt absorption by plants, III, 881.
- Hoagland, H., Rubin, M. A., and Cameron, D. E., brain wave frequencies and cellular metabolism effects of dinitrophenol, III, 670.
- See also Himwich, H. E.
- Hoar, T. P., cathode reactions in metallic corrosion, I, 572.
- Hoard, J. L., structures of complex fluorides; potassium heptafluoroborate and heptafluorotantalate; configuration of the heptafluoroniobate and -tantallate ions, I, 359.
- and Nordsieck, H. H., structure of potassium molybdocyanide dihydrate; configuration of the molybdenum octacyanide group, I, 600.
- and Vincent, W. B., structures of complex fluorides; potassium hexafluogermanate and ammonium hexafluogermanate, I, 600.
- Hoare, C. A., morphological and taxonomic studies on mammalian trypanosomes. V. Diagnostic value of the kinetoplast, III, 327.
- and Broom, J. C., differentiation of *Trypanosoma uniforme* and *T. vivax* in mixed infections, III, 427.
- Hoare, E. D., prophylaxis with sulphanilamide, III, 302. Suitability of "liquid" in blood culture media, with reference to anaerobic streptococci, III, 727.
- Hoather, R. C., and Hand, P. G. F., use of Lovibond tintometer for colorimetric determination of formaldehyde by the phloroglucinol method, II, 133.
- Hobart, G. See Davis, H.
- Hobbs, B. C., rôle of bacteria in reduction of methylene-blue in milk, III, 526.
- Hobbs, J. E., chain reaction in thermal decomposition of diethyl ether, I, 30.
- and Hinshelwood, C. N., mechanism of chain breaking in thermal decomposition of ethane, I, 30. Reaction chains in thermal decomposition of hydrocarbons; comparison of methane, ethane, propane, and hexane, I, 30.
- Hobbs, M. E., solid state of H., HD, and D., I, 357. Solvent effect in dipole moment measurements, I, 551.
- Hobday, G. I. See Falconer, R.
- Hobden, F. W., Johnston, E. F., Weldon, L. H. P., and Wilson, C. L., determination and calculation of equilibrium constants for isotopic hydrogen exchange in the systems *n*-amyl alcohol-water and ethylthiol-water; vapour pressures and Raman spectra of *n*-amyl deuterolcohol and ethyldeuteriothiol, I, 143.
- Hobson, F. G., and MacQuaide, D. H. G., treatment of meningococcal meningitis with M. and B. 693, III, 179.
- See also Hannah, R. H.
- Hobson, R. P., sheep blow-fly investigations. VII. Development of eggs and composition in *Lucilia sericata*, Mg., III, 590.
- Hobson, W., relationship between physical exercise, carbohydrate metabolism, and urinary output of creatine and creatinine, III, 997.
- Hocart, R., and Guillaud, C., [crystal structure of] the alloy MnBi, I, 559.
- See also De Lapparent, J., and Weil, R.
- Hoch, J., estrogenic substances; synthesis of keto-1:2-cyclopentenophenanthrenes, II, 75.
- Hochapfel, L., simultaneous occurrence of schizophrenia and progressive muscular dystrophy in one family, III, 373.
- Hochberg, S. See La Mer, V. K.
- Hochman, A. See Sulman, F., and Zondek, B.
- Hochman, H. See Koelsch, C. F.
- Hochrein, M., cause and significance of angina pectoris, III, 236.
- and Schleicher, I., bronchial asthma and lumbar puncture, III, 750.
- Hochsinger, K., continued treatment of congenital myxedema over 43 years, III, 138.
- Hochstetter, F., development and differentiation of the human meninges, III, 806.
- Hock, A., digestion of carbohydrates, with special reference to starch, III, 173.
- Hock, H., and Neuwirth, A., peroxides from open-chain olefines and from olefines of a technical cracked benzene, II, 466.
- Hockett, R. C., and McClenahan, W. S., oxidation of glucosides by lead tetraacetate, II, 407.
- and Maynard, C. W., jun., tetrose sugars. IV. Structure of a methyl-*d*-erythroside; mutarotation of *d*-arabinose-oxime, II, 493.
- Phelps, F. P., and Hudson, C. S., relations between rotatory power and structure in the sugar group. XXXIII. α - and β -Methylpyranosides of *L*-fucose (*L*-galactomethylose) and their triacetates, II, 408.
- See also Watters, A. J.
- Hocquette, M., and Hocquette, (Mme.) M., structure of nuclei in *Cucurbita pepo*, III, 445.
- Hocquette, (Mme.) M. See Hocquette, M.
- Hodapp, E. L. See Luyet, B. J.
- Hodes, B. R. See Lissák, K.
- Hodes, H. L., Stifler, W. C., jun., Walker, E., McCarty, M., and Shirley, L. G., use of sulphapyridine (M. & B. 693) in primary pneumococcal pneumonia and in pneumococcal pneumonia associated with measles, III, 775.
- Hodge, E. B., limits of inflammability of mixtures of propane, air, and nitrogen peroxide, I, 84.
- Hodge, H. C., Luce-Clausen, E. M., and Brown, E. F., fluorosis in rats due to contamination with fluorine of commercial casein; effects of darkness and of controlled radiation on pathology of teeth, III, 1067.
- See also MacLachlan, P. L.
- Hodgkin, A. L., subthreshold potentials in a crustacean nerve fibre, III, 28.
- Relation between conduction velocity and electrical resistance outside a nerve fibre, III, 244.
- See also Cole, K. S.
- Hodgson, H. G., radiology of the mastoid process, III, 641.
- Hodgson, H. H., diazo-chemistry, II, 209, 543.
- and Davey, W., mononitration of α - and β -naphthylamines in presence of carbamide, II, 150.
- and Davies, R. R., preparation of 2- and 3-hydroxyfuran, II, 334. Nitrosation and nitration of 2- and 3-hydroxyfuran, II, 383.
- and Elliott, R. L., case of simple substitution in the 3-position of a 1:2-disubstituted naphthalene, II, 151.
- Hodgson, H. H., and Leigh, E., nitronaphthyl and aminonaphthyl alkyl sulphides, II, 111. Normal and abnormal reactions of the sodium derivatives of aromatic thiols with halogenonitronaphthalenes and -benzenes, II, 418.
- and Marsden, E., electrolytic condition of aniline hydrochloride, aniline hydriodide, and α -naphthylamine hydriodide in aniline solution, I, 474.
- and Nicholson, D. E., nitrosation of phenols. XVI. *m*-Fluorophenol; a new red indophenol, II, 512.
- and Smith, R., dissociation constants of *m*-halogenated phenols and their mononitro-derivatives, I, 263.
- Hodgson, T. H., chloride content of blood serum and aqueous humour; its relation to glaucoma and to formation of intra-ocular fluid, III, 37.
- Hodson, A. Z. See Bauernfeind, J. C.
- Höber, J. See Höber, R.
- Höber, R., Andersh, M., Höber, J., and Nebel, B., influence of organic electrolytes and non-electrolytes on membrane potentials of muscle and nerve, III, 565.
- See also Öhnell, R.
- Höfer, K., Holtz, F., and Koinzer, M., survival of cooled grafted tumours, III, 847.
- Högberg, B. See Euler, H. von.
- Högger, D., increase of bacteriophage in ultrafiltrates, III, 1106.
- Hoehn, H. H. See Smith, L. I., and Webb, T. J.
- Hoehn, W. M. See Mason, H. L., and Reynolds, H.
- Hoejenbos, L. See Coppens, A.
- Hoeke, F., determination of maltose in presence of other sugars, II, 294.
- Hoekstra, R. A., and Brugman, P., effect of serum on vital staining, III, 958.
- Hoelandt, N., and Stokvis, B., simple technique for psycho-galvanography, III, 668.
- Höllering, H. F. See Marrack, J.
- Hoelzel, F., Da Costa, E., and Carlson, A. J., effect of protein feeding on secondary sex ratio of offspring of rats, III, 978.
- Hoer, E., Langefeld, H., and Oehme, C., relation between thyroid and adrenal. V., III, 1051.
- Hönigschmid, O., and Hirschbold-Wittner, F., at. wt. of the chlorine isotopes ^{35}Cl and ^{37}Cl isolated by Clusius and Dickel, I, 591.
- and Liang, S. C., at. wt. of iron, I, 395.
- and Wittner, F., at. wt. of lutecium; analysis of lutecium trichloride, I, 169.
- See also Baxter, G. P.
- Hönl, H., top model of the electron and its application to probability of radiation by electron-position pairs, I, 55.
- and Papapetrou, A., inner motion of the electron. I., I, 394.
- Hoepke, H., lymphoid tissue and acid-base balance of the body, III, 15.
- Hemping, W., and Desaga, H., effect of acid and alkaline diets on lymphatic tissues of the mouse, III, 15.
- Höring, F. O., yellow fever research and the pathogenesis of virus diseases, III, 946.
- Hoerner, G., Fontaine, R., and Mandel, P., kidney in hypertension from denervation of the carotid sinuses, III, 239.

- Hörner, O., influence of vitamin-C on the growth of transplanted mouse sarcoma, III, 995.
- Hörnisch, H. See Herzog, A.
- Hörstadius, S., mechanics of sea-urchin development, studied by operative methods, III, 443.
- Höss, O. See Dane, (Frl.) E.
- Hofbauer, J., intravenous administration of post-pituitary extracts for obstetric purposes, III, 475.
- Hofer, E., relation between solubility of crystals and their size during deposition from solution, I, 252.
See also Przylecki, S. J. von.
- Hoff, E. C., Kramer, T. C., DuBois, D., and Patten, B. M., electrocardiogram of the embryonic heart, III, 654.
- Hoff, F., influence of lactoflavin and corticosterone on experimental renal diabetes, III, 79. Intravenous administration of drugs acting on the uterus in labour, III, 714.
and Bachmann, L., iodophilia of leucocytes, III, 891.
- Hoff, H., and Pözl, O., somatotopic factors in hemiatheiosis, III, 371.
and Shaby, J. A., bilharziasis and its treatment, III, 865.
- Hoff, H. E., physiology, III, 915.
and Nahum, L. H., supernormal period in the mammalian ventricle, III, 358.
- Smith, P. K., and Winkler, A. W., electrocardiographic changes and concentration of calcium in serum following intravenous injection of calcium chloride, III, 655.
See also Nahum, L. H., Winkler, A. W., and Wise, B.
- Hoff, W. See Pauli, W.
- Hoff-Jørgensen, E., redox potential determinations in β -hydroxybutyric acid-dehydrogenase-acetoacetic acid, III, 97.
and Lehmann, J., preparation of fumarase-free dehydrogenase solutions, especially of hydroxysuccinic- and succinic-dehydrogenase, III, 516.
- Hoffet, J. H., genesis of iron deposits on right bank of Red River (Tonkin), I, 226.
- Hoffman, A. M. See Butt, E. M.
- Hoffman, C. F. See Duncan, C. W.
- Hoffman, E. J., Ralston, A. W., and Ziegler, G. E., hydrophil balance studies on high mol. wt. ketones, I, 255.
- Hoffman, G. R. See Owen, C. A.
- Hoffman, J. G., and Bacher, R. F., photographic effects produced by cadmium and other elements under neutron bombardment, I, 3.
and Bethe, H. A., neutron absorption limit of cadmium, I, 53.
See also Livingston, M. S.
- Hoffman, J. I., and Lundell, G. E. F., volatilisation of metallic compounds from solutions in perchloric or sulphuric acid, I, 428.
- Hoffman, R. S. See Doljanski, L.
- Hoffman, W. S. See Thompson, W. O.
- Hoffmann, A., effect of training on skeletal musculature, III, 26.
- Hoffmann, Alex. See Hilpert, R. S.
- Hoffmann, C. See Tschitschibabin, A. E.
- Hoffmann, E., determination of small amounts of oxygen in argon up to 0.002 vol.-%, I, 214.
- Hoffmann, Erich, staining of fungi and micro-organisms with azureosin-glycerin, III, 1. Azureosin glycerin drop stain for mycosis and other skin lesions, III, 645.
- Hoffmann, Erna, relationship between islets of Langerhans and gonads, III, 380.
- Hoffmann, F., and Tingwaldt, C., effective wave-lengths in optical pyrometry, I, 339.
- Hoffmann, H. E., and Hollmann, W., taking electrocardiographic records based on triangle theory of Einthoven, III, 359.
- Hoffmann, I. See Schenck, R.
- Hoffmann, Josef, changes in quartz and glasses on irradiation, I, 272. Cause of colour of mineral salts, I, 343.
- Hoffmann, K., electrophoretic migration velocity of colloid particles at high field strengths, I, 78. Magnitude and determination of potentials due to falling particles during centrifuging of colloidal solutions, I, 470.
- Hoffmann, M., experiences with resyl-Ciba, III, 307.
- Hoffmann, M. M. See Schour, I.
- Hoffmann, Otto. See Karrer, P.
- Hoffmann, P., nervous system and muscle action, III, 568. Dietary errors in sucklings and small infants, III, 1065.
- Hofmeister, W., effect of male hormone on oxygen consumption and fat metabolism, III, 54.
- Hofmann, E. See Lindner, J.
- Hofmann, H. J., reactivity of carbon tetrachloride, II, 96.
- Hofmann, K., and Bergmann, M., isolation of crystalline heterotrypsin from beef pancreas, III, 518. Specificity of trypsin. II, III, 1009.
See also Behagel, O., and Ruzicka, L.
- Hofmann, U., and Holst, R., acidic nature and methylation of graphitic oxide, I, 332.
- Hofmann, W., X-ray methods in investigation of aluminium alloys, I, 193.
- Hofmeier, K., nutrition of infants, III, 700.
- Hofrichter, C. H., jun. See Post, H. W.
- Hofstadter, R., photoconductivity in willemite, I, 60.
See also Bonner, L. G., Herman, R. C., and Williams, V.
- Hofsten, N. von, divergent and parallel development in birds and mammals, III, 956.
- Hofstetter, H. See Butenandt, A.
- Hogaboom, G. B., jun. See Hall, N.
- Hogan, A. G. See Guerrant, R. E.
- Hogart, R., H. Ungemach, 1879—1936, I, 346.
- Hogarth, J. C., proseptasine in measles, III, 774.
- Hogden, C. G. See Robinson, H. W.
- Hoge, H. J., and Brickwedde, F. G., temperature scale for calibration of thermometers between 14° and 83° K., I, 388.
- Hoggarth, E. See Clemo, G. R.
- Hogge, E., and Johnston, H. L., activity coefficients of barium and strontium carbonates in aqueous solutions of alkali chlorides, I, 523.
- Hogness, T. R., spectroscopic studies on enzyme systems, III, 938.
See also Altschul, A. M., Haas, E., Horecker, B. L., and Junowicz-Kocholaty, R.
- Hogreve, F., determining fat in various parts of live pigs of different strains, III, 771.
- Hogue, M. J., and De Rényi, G. S., giant cells in tissue culture, III, 809.
See also De Rényi, G. S.
- Hohenadel, B. See Auler, H.
- Hohl, L., production of alcohol by *Saccharomyces ellipsoideus* in syrupe fermentations, III, 100.
- Hohlweg, W., and Inhoffen, H. H., pregnenolone, a new corpus luteum preparation, III, 587.
- Hohmann, E. See Bommer, H.
- Hohn, J., water-blue as an indicator for determining type in diphtheria bacilli, III, 1101.
- Hohor, V. See Grimalski, V.
- Hoi, B., synthesis of benzil- α -carboxylic and β -deoxybenzoic- α -carboxylic acids, II, 429. Phenolhomophthalcin, II, 519. Friedel and Crafts reactions affected by steric hindrance, II, 548.
and Kin, L. C., structure and absorption spectrum of α -phthalaldehydic acid, I, 507. Structure and absorption spectrum of phthalonic acid, I, 507.
- Hoisington, L. E., and Breit, G., Coulomb wave functions for high energies, I, 6.
See also Breit, G.
- Hoitink, A. W. J. H., plasma-colloid osmotic pressure and -lipins after acute hemorrhage and their relationship to the spleen, III, 118.
- Hoja, E., previous history of the platinum electrode and its influence on the potential jump [induced by] light, I, 374.
- Holbourn, A. H. S., production of very fine quartz fibres, I, 626.
- Holbrook, A. A., normal venous pressure as determined by a direct method, III, 21.
- Holbrook, W. P. See Hensch, P. S.
- Holcomb, W. F., and Hamilton, C. S., arsenated phenoxybutanols, II, 350.
See also Binkley, S. B., and McCorquodale, D. W.
- Holden, A. N., Kohman, G. T., Mason, W. P., and Morgan, S. O., heavy water Rochelle salt, I, 553.
- Holden, F. R., and Ralston, C. E., basophilic aggregation test applied to cement workers, III, 317.
See also Harold, G. C.
- Holden, H. F., use of the glass electrode in the biological laboratory, III, 221.
and Lemberg, R., ultra-violet absorption spectra of bile-pigment iron compounds and of some bile pigments, III, 914.
See also Feldberg, W., and Kellaway, C. H.
- Holden, R. J., magmatic carbonation-carbothermal metamorphism, I, 345.
- Holder, C. H., and Maass, O., hydrogen chloride-propylene reaction in the region of the critical temperature, I, 203.
- Holfelder, H., basis of modern X-ray therapy, III, 717.
- Holiday, E., absorption spectra of proteins, I, 449. Protein molecule, III, 785.
- Hollaender, A., and Emmons, C. W., action of ultra-violet radiation on spores of *Trichophyton mentagrophytes*, III, 791.
See also Dalla Valle, J. M.
- Holland, E. B., and Ritchie, W. S., [determination of] zinc, I, 535.
- Hollande, A. C., structure of protoplasm and origin of cytoplasmic apparatus, III, 1015.
- Hollander, E., clinical gauge for sensitivity to pain, III, 370.
- Hollander, F., and Jemerin, E. E., preparation of stomach pouch without interruption of vagal supply, III, 62.
- Hollander, L., contact dermatitis due to pontocaine hydrochloride [decicaine], III, 1087.

- Holleck, L., transition phenomena with samarium ions in aqueous solution, I, 267. Polarographic determination of europium in mixtures of the rare earths, I, 338.
- Holleman, L. W. J., and Koolhaas, D. R., formation of higher aliphatic ketones in thermal decomposition of fat, II, 357.
- Hollenbach, F., intravenous anaesthesia with eunaron and evipan, III, 88.
- Holley, C. E., jun. See Copley, M. J.
- Holling, H. E. See Montgomery, H.
- Hollingshead, E. A. See James, W. A.
- Hollingsworth, E. W. See Eck, J. C.
- Hollis, (Miss) F., Richards, J. H., and Robertson, A., marrubiin, a diterpenoid lactone, II, 329.
- Hollister, C. B., relief of hypertension after tonsillectomy, III, 239.
- Hollmann, H. E., rhythmic electrical stimulation of the human heart at its own rate, III, 17.
- and Hollmann, W., Einthoven's triangle, III, 235.
- Hollmann, S., effect of calcium ions on glycolysis in muscle, III, 608.
- See also Deuticke, H. J.
- Hollmann, W., and Guckes, E., clinical importance of the triogram, III, 559.
- See also Hoffmann, H. E.
- Holloway, J. T., phylogenic significance of diterpenes of phyllocladene and podocarpene groups, III, 109.
- Holloway, M. G., and Moore, B. L., disintegration of ^{14}N and ^{16}N produced by deuteron bombardment, I, 592.
- See also Livingston, M. S.
- Holly, O. M. See Sandberg, M.
- Holm, K. See Gunther, P.
- Holman, R. L., complete anuria due to blockage of renal tubules by protein casts in case of multiple myeloma, III, 595.
- Holmberg, B., phenylethyl thioacetate, II, 155. Fission of phenylethylthioacetic acids, II, 158. Styrene, iodine, and dithioacetic acid, II, 158. Stereochemical studies. XX. Optically active phenylethylthioacetic acids and phenylethyl mercaptans, II, 546.
- Holmberg, C. G., function of ascorbic acid in human cerebrospinal fluid, III, 31.
- Purification of uricase, III, 721.
- Holmberg, T. See Granit, R.
- Holmbergh, O., purification of malt amylase, III, 519.
- Holmdahl, D., formal and experimental aspects of morphogenesis of vertebrate organism, III, 888.
- Holmes, A., origin of primary lead ores. II, I, 345.
- Holmes, A. D., Tripp, F., and Satterfield, G. H., vitamin-A reserve of fur-bearing animals, III, 285. Ascorbic acid content of chick blood, III, 289.
- Tripp, F., Woelfer, E. A., and Satterfield, G. H., breed and seasonal variations in ascorbic acid contents of certified milk from Guernsey and Holstein cows, III, 705.
- Holmes, B. E., effect of X-rays on glucose and hexose phosphate glycolysis of tumour tissue, III, 718.
- Holmes, B. M. See Davies, W.
- Holmes, C. E., Herrick, C. A., and Ott, G. L., coccidiosis in chickens; calcium carbonate additions and coccidia, III, 72.
- Holmes, E. See Dawson, C. R., and Maddock, S.
- Holmes, F. E., duplicating pipettes, I, 341.
- Holmes, H. L., and Robinson, (Sir) R., strychnine and brucine. XLI. Re-examination of action of bromine on diketonucidine and its bearing on structure of the alkaloids, II, 290.
- Holmes, H. N., Campbell, K., and Amberg, E. J., effect of vitamin-C on lead poisoning, III, 922. Vitamin-C treatment in lead poisoning, III, 1072.
- and Campbell, K., determination of vitamin-C in urine, III, 1073.
- and Corbet, R. E., catalytic effects of porous powders on pure vitamin-A, III, 400.
- Holmes, J. M., osteomalacia of the spine with chronic diarrhoea, III, 388.
- See also Greenfield, J. G.
- Holmes, J. W., Jones, J. A., and Gildersleeve, N., treatment of gonorrhoeal vulvovaginitis in children with silver picrate suppositories, III, 1000.
- Holmes, R. See Duff, D. C. B.
- Holmgren, B., blood-vessels of uterus under normal conditions and in myoma, III, 686.
- Holmgren, H., daily variations in weight of liver, lung, and spleen of the white rat, III, 223. Effect of sulphuric esters [heparin] on growth of tadpoles, III, 643.
- See also Sjögren, B.
- Holmgren, I., intestinal fermentative dyspepsia, III, 842.
- Holmin, N., vitamin-B₁ in treatment of nervous diseases, III, 572.
- Holmqvist, S., resistance of the surface of contact between antimony and cadmium, I, 524.
- Holschneider, F. W. See Winterfeld, K.
- Holst, G., thermodynamics of reversible hydrogenation processes, I, 265.
- Holst, K. A. See Krieble, V. K.
- Holst, R. See Hofmann, U.
- Holst, S., and Turner, C. W., lactogen content of anterior pituitary of growing rabbits and guinea-pigs, III, 1047.
- Holste, K. See Orzechowski, G.
- Holstein, T. See Primakoff, H.
- Holt, J. P. See Lawson, H.
- Holt, L. E., jun. See Richter, C. P.
- Holter, H., and Doyle, W. L., enzyme studies on protozoa, III, 327.
- Holtermann, C., and Laffitte, P., formation and dissociation of strontium peroxide, I, 210.
- Holtfreter, I., developmental potencies of isolated parts of the gastrula of urodeles, III, 224. Developmental potencies of isolated parts of the gastrula of anura, III, 225. Formative factors in development of amphibian organs. I. Dynamic mode of reaction of isolated cells of segmentation period and developmental mechanics of endodermal organs, III, 1022.
- Holtz, F., parathyroid insufficiency, III, 680.
- See also Höfer, K.
- Holtz, P., formation of a pressor substance from dihydroxyphenylalanine by animal tissues, III, 180.
- Heise, R., and Lüdtkke, K., enzymic destruction of L-dihydroxyphenylalanine (dopa) by the kidney, III, 390.
- Holtz, W., and Müller, R., combination of nitrogen and oxygen in the glow discharge, I, 238.
- Holway, A. H., and Hurrich, L. M., visual differential sensitivity and retinal area, III, 133.
- See also Crozier, W. J.
- Holwerda, B., determination and occurrence of phospholipins in milk and milk products, III, 157.
- Holyoke, E. A. See Grodinsky, M.
- Holz, S., combined effect of nicotine and adrenalin on the isolated, right atrium of rabbit's heart, III, 182. Effect of faradic stimulation on the isolated, right atrium of rabbit's heart; combined action of adrenaline and nicotine, III, 182. Combined effect of adrenaline and nicotine on non-pulsating, auricular tissue of rabbit's heart, III, 454.
- Holz, W., staining mycelium of *Fusicladium dendriticum* in apple leaves, III, 438.
- Holzappel, L., results and application of low-temperature research (cryolysis) to colloids, I, 75.
- See also Günther, Paul.
- Holzhausen, H. G., lecithin treatment of pulmonary tuberculosis, III, 781.
- Holzinger, L. See Faltis, F.
- Holzmann, M., electrocardiography, III, 558.
- Holzschmidt, V. A., and Potapov, I. V., catalytic action of tetra-ammonium salts, I, 33.
- Home Office, annual report of the Chief Inspector of Factories and Workshops for 1937, III, 93. Protection of eyes regulations, 1938, III, 619. Protection against eye accidents, III, 619. Report on lighting in factories, III, 619.
- Homma, H., connective tissue structure and elasticity, III, 740.
- Homma, K., bergenin from *Mallotus japonicus*, J. Mueller, III, 734.
- Homp, R., thermo-orientation of *Pediculus vestimenti*, III, 316.
- Honda, K., and Hirone, T., theory of the change in electric resistance in metals due to hydrostatic pressure, I, 66. Magnetic anisotropy of iron, nickel, and cobalt, I, 186.
- Honeyburne, (Miss) J. See Brentano, J. C. M.
- Hongo, G., determination of vitamin-B₁ by the thiochrome method, III, 851.
- Hoof, C., euglobulin and pseudoglobulin in normal and pathological human serum, III, 12.
- Hoog, H., and Eichwald, E., analysis of hydrocarbon mixtures (boiling in the gasoline range), using thioacetic acid to remove olefines, II, 351.
- Smittenberg, J., and Vissen, G. H., composition of primary polymerisation products of propene and the butenes, II, 136.
- Verheus, J., and Zuiderweg, F. J., cyclisation (aromatisation) of aliphatic hydrocarbons, II, 472.
- See also Wibant, J. P.
- Hooghiemster, E. See Deinsse, F. van.
- Hook, A. van, supersaturation and formation of Liesegang rings. III, I, 370.
- Hooker, C. W., and Cunningham, B., regeneration of testis in the fowl, and its bearing on germ-cell theory, III, 443.
- and Newman, G. C., effect of iodine on interstitial cells of the testis, III, 688.
- Hooker, S. B. See Boyd, W. C.
- Hooley, J. G. See Hicks, J. F. G., jun., and Stephenson, C. C.
- Hoover, S. R. See Allison, F. E.

- Hopf, H., formation of coloured zones by wood-destroying fungi in culture, III, 521.
- Hopf, H. S., nutrition of the ash-bark beetle, *Hylesinus fразini*, Panz., III, 397.
- Hopf, P. P., and Le Fèvre, R. J. W., pyrylium salts from acid anhydrides and acid chlorides, II, 83. Alleged optical activity of *o*-toluidine-3:5-disulphonic acid, II, 309. Decomposition of diazo-perbromides derived from azobenzene, II, 364.
- Hopkins, C. Y., mounting of small metal specimens in resin plaques, I, 583. Sulphur-containing substance from the seed of *Conringia orientalis*, III, 216.
- Hopkins, (Sir) F. G., laboratory effort in cancer research, III, 1062.
- Lutwak-Mann, C., and Morgan, E. J., activity of the succinic dehydrogenase, III, 719.
- Hopkins, J. W. See McRostie, G. P.
- Hopkins, R. L. See Barkenbus, C.
- Hopkins, R. N., Yerger, E. S., and Lynch, C. C., some properties of the dioxan-ethyl alcohol system, I, 558.
- Hopp, G. See Schmidt, A. W.
- Hoppe, T., oral administration of prontosil in epidemic meningitis, III, 999.
- Hopper, I. V., MacGregor, J. H., and Wilson, F. J., hydrolysis of arylamides used as dye intermediates, II, 505.
- Hopper, V. D. See Laby, T. H.
- Hopwood, F. L., and Phillips, J. T., polymerisation of liquids by irradiation with neutrons and other rays, I, 379. See also Nahmias, M. E.
- Horan, H. A., cobaltamine salts of 12-molybdophosphoric acid, I, 533. and Skarulis, J. A., system $\text{Li}_2\text{SO}_4\text{-Al}_2(\text{SO}_4)_3\text{-H}_2\text{O}$ at 0° , I, 612.
- Horan, V. G., and French, S. G., sulphonamide in treatment of acute mastoiditis, III, 81.
- Horecker, B. L., Stetzel, E., and Hogness, T. R., promoting effect of aluminium, chromium, and rare earths in the succinic dehydrogenase-cytochrome system, III, 626. See also Haas, E.
- Horejši, J., Takata reaction in the blood serum [and liver function], III, 119. and Mecl, A., metabolism of amino-acids and liver function. II., III, 771. Mecl, A., and Spisarová, J., metabolism of amino-acids and liver functions. I., III, 271.
- Hori, N., galvano-magnetic effect of ferromagnetic single crystals, I, 245. See also Hirone, T.
- Horii, Z., *p*-thiocyanophenylhydrazine. VII., II, 373. Synthesis of 4-methylcoumarin derivatives, using metallic chlorides as condensing agent, II, 440. and Kinouchi, T., *p*-thiocyanophenylhydrazine. VI. [Friedel-Crafts reaction with derivatives of diphenyl ether], II, 373.
- Horiuti, J., and Ikusima, M., mechanism of the hydrogen electrode process on platinum, I, 340. and Kwan, T., mechanism of contact hydrogenation of carbonyl groups in presence of metallic catalysts, I, 377. See also Hirota, K.
- Horn, E., serum therapy in pneumococcal lobar pneumonia, III, 429.
- Horn, F., and Pollmann, A. L., galactose tolerance in infants during feeding with a diet rich in carbohydrates, III, 173.
- Horn, H. See Denzer, B. S.
- Horn, Z., diabetes treatment and surgery, III, 975. Action of somnifen on blood-sugar regulation in man, III, 1086.
- Hornbostel, J., and Valente, F. A., resonance levels for neutron capture of iodine and indium, I, 173.
- Horner, L., *Strychnos* alkaloids. XXI. Synthesis of isomeric pyrroloquinolines and an isomeric vomipyrine, II, 458.
- Horner, W. D., and Bettman, J., synthetic adrenaline bitartrate as a mydriatic, III, 1001.
- Hornbrook, J. W., and Ashburn, L. L., experimental pertussis in the young rat, III, 630.
- Hornig, F., difficulties of diagnosis in carcinoma of the lung after asbestosis, III, 95.
- Horning, E. C. See Fuson, R. C.
- Horning, E. S. See Cramer, W.
- Hornung, B. See Epprecht, A. G.
- Hornus, G., and Thibault, P., ectromelia produced in mice by inoculation of human blood, III, 728. See also Grabar, P.
- Horodniczy, H., and Jablonski, A., temperature influence on pressure broadening of spectral lines, I, 112, 589.
- Horowitz, M. T., anatomy of (a) lumbrosacral nerve plexus—its relation to variations of vertebral segmentation, and (b) posterior sacral nerve plexus, III, 955.
- Horowitz, N. H. See Tyler, A.
- Horrex, C., Greenhalgh, R. K., and Polanyi, M., catalytic exchange of hydrogen, I, 329.
- Horseman, A. See Daunt, J. G.
- Horsfall, F. L. See Tiselius, A.
- Horst, J. ter. See Schmitz-Dumont, O.
- Horst, L. M. ter, the *QT* interval, its connexion with clinical effects of digitalis, strophanthin, and calcium, III, 1085.
- Horstmann, F. H. See Herrenberger, K.
- Horton, B. T., outlook in thrombo-angiitis obliterans, III, 238. Maclean, A. R., and Craig, W. McK., new syndrome of vascular headache: results of treatment with histamine, III, 670. and Roth, G. M., hypersensitiveness to cold with paradoxical adrenaline-like systemic reaction, III, 897.
- Horváth, J. See Szeloczy, J.
- Horvath, W. J. See Salant, E. O.
- Horvay, C., iteration method and its application to the oxygen problem, I, 176.
- Horvitz, H. J. See Roberts, R. G.
- Horwitt, M. K., glass electrode for determining blood- pH at 38° , III, 355. and Cowgill, G. R., effects of ingested lead on the organism. II. Dog, III, 865.
- Horwitz, M. T., and Tocantins, L. M., rôle of long thoracic nerve and related scapular bursæ in the pathogenesis of local paralysis of the serratus anterior muscle, III, 441.
- Horwitz, W. See Glockler, G., and Livingston, R.
- Horwitz, W. A. See Harris, M. M., and Polatin, P.
- Hosaka, I. See Uchino, T.
- Hoschek, E., and Klemm, W., vanadium oxides, I, 473. Vanadium selenides, I, 484.
- Hoselitz, K. See Munson, R. J.
- Hosi, K. See Akizuki, S.
- Hoskins, R. G., Levene, H. M., and Bevin, S., relationship of male sex hormone to level of bodily vigour in senility, III, 982.
- Hoskins, W. H., Coffman, J. R., Koch, F. C., and Kenyon, A. T., effect of testosterone propionate on urinary excretion of androgens and oestrogens in eunuchoidism, III, 687. and Koch, F. C., inhibition of comb growth in cockerels and capons by oestrone, III, 981. Reciprocal nature of testis-comb relationship, III, 983.
- Hosokawa, H. See Sikinami, Y.
- Hosoya, Y., Okita, T., and Akune, T., light-sensitive substance in retinal cones, III, 376.
- Hosse, W. See Schmid, L.
- Hotchkiss, R. D. See Linderström-Lang, K.
- Hotchkiss, R. S., Brunner, E. K., and Grenley, P., semen analyses of 200 fertile men, III, 268.
- Hotz, H. W., treatment of European spruce, III, 292. Differential diagnosis and treatment of steatorrhœa, III, 388.
- Hotz, R. See Greene, C. H.
- Hon, H. C., pellagra and its treatment with nicotinic acid, III, 1092.
- Houchin, O. B., Graham, W. R., jun., Peterson, V. E., and Turner, C. W., composition of blood of dairy goat, III, 894. and Turner, C. W., relation of pituitary to blood-lipins, III, 676. Assay of fat-metabolism hormone of anterior pituitary, III, 973.
- Houget, J. See Aubel, E., and Cahn, T.
- Hough, H. See Clark, D.
- Houghten, F. C., Gutberlet, C., and Witkowski, E., draught temperatures and velocities in relation to skin temperature and feeling of warmth, III, 94.
- Houlbrooke, A., and Manley, C. H., excretion of bismuth and its determination in urine and faeces, III, 344.
- Houo, O. A., a β -diene alcohol, II, 136. Preparation of α -substituted β -ethylenic alcohols, II, 198.
- Houpillart, J. See Dufraisie, C.
- Houssay, B. A., and Biasotti, A., diabetogenic activity of anterior pituitary extract in adrenalectomised dogs, III, 46. Diabetogenic activity of various hypophyseal hormones, III, 47. See also Fasciolo, J. C.
- Houston, J., Cotton, A. G., Kon, S. K., and Moore, T., spectroscopic changes in fatty acids. IV. Effect of nutrition of cows on acids of butter fat, III, 1066. and Kon, S. K., free and bound vitamin- B_1 in milk, III, 703. Vitamins of rat's and guinea-pig's milk, III, 1067. See also Cruikshank, E. M.
- Houston, J. C., comparison of ether, spinal, and cyclopropane anaesthesia, III, 615.
- Houston, W. V., resonance broadening of spectral lines, I, 50. Conservation of momentum in electrical conductivity, I, 447.
- Houstoun, K. A., measuring the velocity of light, I, 56.
- Hove, E., Elvehjem, C. A., and Hart, E. B., arsenic in the nutrition [and effect on blood] of the rat, III, 228. Aluminium in the nutrition of the rat, III, 283. Zinc deficiency in rats, III, 398.
- Hovorka, F., and Mendenhall, E. E., cathode-ray tube alternating-current bridge detector for conductivity measurements, I, 492.

- Hovorka, V., determination of tungsten by vanillylidenebenzidine, I, 101. Determination of molybdenum by vanillylidenebenzidine, I, 101.
- and Sykora, V., oximino-*N*-phenyl-3-methylpyrazolone as a reagent in analytical chemistry, I, 217. Reactions of oximino-3-methyl-5-pyrazolone with metallic salts, I, 385.
- and Vorisek, J., separation of uranium from manganese, zinc, calcium, strontium, barium, and magnesium by means of isatin- β -oxime, I, 388.
- Howard, A. D., cristobalite in southwestern Yellowstone Park, I, 536.
- Howard, C. S., dipping-type conductivity cell, I, 581.
- Howard, E., representation of the adrenal X zone in rats, in the light of observations on X zone variability in mice, III, 42.
- Howard, H. W., possible action of phytohormones as root-determiners, III, 341.
- Howard, I. See Murphy, W. P.
- Howard, P. J., [treatment of] congenital syphilis, III, 509.
- Howard, R. P. See Thorn, G. W.
- Howe, D. E. See Bielfeld, L. P.
- Howe, J. P., and Herbert, W. S., coupling of vibrations with electronic levels in rare-earth compounds, I, 298.
- Howe, J. S., bacillæmia in experimental tuberculosis in dogs, III, 1104.
- Howe, P. E., problems in attaining adequate nutrition, III, 991.
- Howell, D. E., and Craig, R., small hygrometer, I, 494.
- Howell, H. G., and Rochester, G. D., band spectrum of antimony fluoride (SbF₃), I, 238.
- Howell, S. F., determination of urea in chicken blood, III, 653. Determination of blood-urea, III, 962.
- Howell, W. H., hæmophilia, III, 354.
- Howell, W. N. See Foster, R. T.
- Howell, W. W. See Garrett, A. B.
- Howells, W. J., persulphate-iodide reaction; specific effects of cations. I, I, 270.
- Howells, W. W., techniques of measuring auricular height in the living, III, 225.
- Howes, N. H., anterior pituitary and growth in axolotl (*Amblystoma tigrinum*, Green, neotenic form). II. Effect of injection of growth-promoting extracts on utilisation of food, III, 1046.
- See also Clements, D. I.
- Howett, B., recovery of the virus of equine encephalomyelitis from the brain of a child, III, 335.
- Howey, J. H., non-cubic growth of single crystals of silver by condensation from vapour, I, 308.
- Howkins, J., and Brewer, H. F., placental blood for transfusion, III, 230.
- and Lawrie, R. S., iniencephalus, III, 542.
- Howlett, F. S., factors affecting rate and course of development of the female gametophyte in apple varieties, III, 799.
- Hoyer, H., and Forster, T., position of the first overtone of the hydrogen link, I, 59.
- Hoyle, F. See Bethe, H. A.
- Hoymann, W. G., effect of growth-inhibiting substances present in nutrient solutions of *Aspergillus* species, III, 425.
- Hoyt, F. C., determination of force fields from scattering in the classical theory, I, 304.
- Hoyt, H. C. See Lindsay, G. A.
- Hoyt, R. E., and Levine, M., action of sulphapyridine *in vitro*, III, 1000.
- See also Larson, W. P.
- Hrabova, J. See Bures, E.
- Hrdlička, A., growth of head during adult life, III, 225. Normal micro- and macro-cephaly in America, III, 739.
- Hrubesch, A. See Koschara, W., and Wieland, H.
- Hrubetz, M. C., and Blackberg, S. N., influence of nembutal, pentothal, seconal, amytal, phenobarbital, and chloroform on blood-sugar concentration and carbohydrate mobilisation, III, 88.
- Hrustanović, K. S. See Pushin, N. A.
- Hrynakowski, K., and Adamanis, F., behaviour of phenols in presence of amines, I, 264.
- and Ellert, H., behaviour of pyridine in binary systems with phenols and ketones, II, 226.
- Hsieh, M. S., and Townend, D. T. A., inflammation of mixtures of air with diethyl ether and with various hydrocarbons at reduced pressures; green flames, I, 204. Examination of the mechanism by which "cool" flames may give rise to "normal" flames. I. Inflammable ranges of ether-air mixtures in closed vessels. II. Inflammable ranges of higher paraffin hydrocarbons in air: establishment of "cool" flame ranges at ordinary temperatures and high pressures, I, 204.
- Hsieh, W. M. See Chang, H. C.
- Hsing, C. Y. See Chuang, C. K.
- Hsu, F., comparative cytological study of the sense organs in insects, III, 36.
- Hsü, Y. H. See Liu, J. H.
- Huang, C. H. See Frehden, O.
- Huang, J. J., vagus-post-pituitary reflex. IV. Determination of its pathways; hypothalamic sympathetic mechanism, III, 474.
- See also Chang, H. C.
- Huang, Y. T. See Chuang, C. K.
- Huang-Minlon, degradations of ergosterol, II, 261.
- See also Inhoffen, H. H.
- Hubacher, M. H., 4:4'-dihydroxy-3:3'-dimethylbenzophenone, II, 551.
- Hubard, S. S., solubility of calcium bicarbonate. II. Partial peptisation, I, 252. Reversible action of oxidised phenols in the deamination of amino-acids, II, 52. Deamination of glycine in the presence of tyrosinase and *p*-cresol, III, 624.
- Hubbard, D., Hamilton, E. H., and Finn, A. N., effect of solubility of glass on behaviour of glass electrode, I, 373.
- Hubbard, D. M., determination of bismuth in biological material; photometric dithizone method, III, 954.
- Hubbard, J. P. See Gross, R. E.
- Hubbard, M. R. See Dummick, F. L.
- Hubbard, R. O. H. See Baker, E. M.
- Hubbard, R. S., and Garbutt, H. R., determination of potassium in serum, III, 651.
- Huber, H. See Weber, F. P.
- Huber, H. L., Kahn, I. S., Maytum, C. K., Ratner, B., and Piness, G., discussion on status asthmaticus, III, 661.
- Huber, K., vicinal phenomena and somatoids, I, 64.
- See also Ruzicka, L.
- Huber, P. See Baldinger, E.
- Huber, W., coincidence of Pelger's variation of white cells and leukæmia, III, 813.
- Hubert, B., and Rappaport, J., influence of *p*-phenylenediamine on the rooting response of cuttings, III, 535.
- Hubert, G. See Hamilton, J. B.
- Hubicki, W. See Estreicher, T.
- Huch, F. H. See Hilpert, R. S.
- Huddleson, I. F. See Hamann, E. E., and Munger, M.
- Hudson, C. B. See Chichester, D. F.
- Hudson, C. S., relations between rotatory power and structure in the sugar group. XXXII. Rotations of the aldonic γ -lactones, II, 405.
- See also Hann, R. M., Haskins, W. T., Hockett, R. C., Jackson, E. L., Maclay, W. D., Montgomery, E. D., Richtmyer, N. K., and Watters, A. J.
- Hudson, F. A., sterilisable filtration unit, I, 493.
- Hudson, J. E. See Aronsohn, H. G.
- Hudspeth, E., and Dunlap, H., low-energy neutrons from the deuteron-deuteron reaction, I, 293.
- Hübner, O., and Schairer, E., transplantation of regional lymphatic tissue of rats bearing the Jensen rat sarcoma, III, 847.
- Huebschmann, H. See Kuhn, R.
- Hückel, H., treatment of gynaecological hemorrhages, III, 583.
- Hückel, R., arterial hypertension, III, 239.
- See also Beumer, H., and Glauberg, K. W.
- Hückel, W., dielectric polarisation, I, 302. Substitution process, II, 147.
- and Niggemeyer, H., *d*-neoisomenthol, II, 434.
- and Tappe, W., Walden inversion, III. Reaction of sulphonic esters with alcohols, II, 120.
- Hühnerfeld, J., action of hæmatoporphyrin-Nencki in diabetes mellitus, III, 855.
- Hüllstrung, H., influence of uleron on gastric acidity and urinary excretion of aneurin, III, 83. Absorption of uleron from the bowel, III, 306.
- See also Engelhardt, W., and Schreus, H. T.
- Hülsman, O. See Biltz, W.
- Hünemann, M. See Straaten, T.
- Hueper, W. C., cartilaginous foci in heart, III, 453. Organic lesions produced by polyvinyl alcohol in rats and rabbits, III, 1090.
- Hüttel, R. See Endres, G.
- Hüttig, G. F., intermediate states in solid reactions: active oxides, I, 426.
- Markus, G., and Franz, E. [with Hnevkovsky, O.], active oxides and reactions of solids. CXV. Velocity of solution of alumina, I, 328.
- Huf, E., irreversible osmosis through frog skin, III, 195. Influence of cyanide on oxygen consumption of isolated frog's skin, III, 498. Relation between respiration and irreciprocal osmosis in the isolated frog's skin, III, 498.
- Huff, E. See Sontag, L. W.
- Huffman, E. F. See Bailar, J. C., jun.
- Huffman, J. R. See Urey, H. C.
- Huffman, M. N. See Smith, G. V.
- Hugel, G., viscosity and chemical constitution, I, 136.
- Huggill, H. P. W., and Plant, S. G. P., bromination of 4-quinolones, II, 342.
- Huggins, C. See Harrington, H. L.

- Huggins, M. L., viscosity of dilute solutions of long-chain molecules. II, I, 318. Structure of insulin, I, 601. Structure of proteins, II, 234.
- Hughes, A. E. See Roy, W. R.
- Hughes, A. H. See Atkinson, E. R.
- Hughes, A. L., scattering of fast electrons in gases, I, 230.
- and Starr, (Miss) M. A., atomic electron velocities in nitrogen and methane, I, 230.
- Hughes, A. M., Corruccini, R. J., and Gilbert, E. C., hydrazine; heat of formation of hydrazine and hydrazine hydrate, I, 612.
- Hughes, A. W. M. See Cameron, G. R.
- Hughes, E. C., device for quantitative evaluation of spectral lines, III, 1095.
- Hughes, E. D., Ingold, C. K., and Masterman, S., ancillary mechanisms in hydrolysis and esterification of carboxylic esters, II, 297.
- See also Bateman, L. C.
- Hughes, E. E., and Acree, S. F., quantitative formation of furfuraldehyde from xylose, II, 7. Quantitative formation of furfuraldehyde and methylfurfuraldehyde from pentoses and methylpentoses, II, 494.
- Hughes, E. H., vitamin-B complex as related to growth and metabolism in the pig, III, 702.
- Hughes, G. K., and Lions, F., indoles. IV. Utilisation of the Japp-Klingemann reaction for the preparation of substituted indolecarboxylic acids. VI. Application of the Fischer synthesis to cyclohexyl ketones, II, 178. Derivatives of 4-hydroxyquinoline, II, 181. Synthesis of 2-aminomethylbenzimidazole and related substances, II, 183.
- Lions, F., Maunsell, J. J., and Wilkinson, T., binuclear isomerism of diphenyl type. III, II, 184.
- Lions, F., Maunsell, J. J., and Wright, L. E. A., heterocyclic compounds derived from pyrocatechol ethers. V. Synthesis of 2:3:6:7-tetramethoxycarbazole and some dimethoxycarbazoles, II, 180.
- Lions, F., Monaghan, F. H., and Wilkinson, T., heterocyclic compounds derived from pyrocatechol ethers. IV. Syntheses of dimethoxybenzacridines, II, 180.
- Lions, F., and Ritchie, E., indoles. VII. Derivatives of 7-nitroindole, II, 519.
- Lions, F., and Wright, L. E. A., derivatives of 2:3'-indeno-5:6-quinoline, II, 182.
- See also Cornforth, J. W., Graves, J. N., Harradence, (Miss) R. H., and Hazlewood, S. J.
- Hughes, H. B. See Schmidt, L. H.
- Hughes, J. See Lansbury, J., Saifer, A., and Strecker, E. A.
- Hughes, J. D., and Clark, J. A., jun., stramonium poisoning, III, 866.
- Hughes, J. S., and Payne, L. F., relation of carotenoid pigments of feed to those of egg-yolk, III, 71.
- See also Feinberg, J. G., and Scott, H. M.
- Hughes, M. H., otogenic cellular meningitis treated with M. & B. 693, III, 503.
- Hughes, T. P. See Bowden, F. P.
- Hughes, W. C. See Wilson, H. N.
- Hughes, W. H., effect of inflammatory exudates on course of experimental tuberculosis, III, 727.
- Hugues, J., mean bleeding time following surgical intervention, III, 450.
- Huguet, J. H. See Baker, E. M.
- Huhn, O. See Widenbauer, F.
- Huidobro, F. See Croxatto, H.
- Huin, O. C., colloidal complex cyanides of heavy metals, I, 319.
- Huisman, L. H. H. See Backer, H. J.
- Hukuhara, T., and Kinose, S., is hormone of intestine movements formed in intestinal mucous membrane by hydrochloric acid? III, 986.
- Hukuti, G., flavonol glucoside of *Calyptegia japonica*, Chois, II, 409.
- Hulbert, F. L. See Davies, W. C.
- Hulburt, E. O., E region of the ionosphere, during the total solar eclipse of 1 Oct., 1940, I, 297.
- See also Andrews, D. H.
- Hulgard, E. R., Campbell, R. K., and Leans, W. N., conditioned discrimination; effect of knowledge of stimulus-relationships, III, 247.
- Hull, A. W., dispenser cathode; new type of thermionic cathode for gaseous discharge tubes, I, 538.
- Hull, H. G. See Reichert, J. S.
- Hull, R. A. See Blaisse, B. S., and Cooke, A. H.
- Hulst, L. A. See Vogelenzang, E. H.
- Hultgren, A. See Carlson, C. G.
- Hultgren, R., existence of a two-phase region in the ordering process, I, 251.
- and Tarnopol, L., effect of silver on the gold-copper superlattice, AuCu, I, 312.
- and Zapffe, C. A., X-ray study of iron-palladium and nickel-palladium systems, I, 364.
- Hulthén, E., dissociation schemes of the diatomic hydrides and deuterides, I, 454.
- Hultquist, M. E. See Crossley, M. L.
- Hultsch, K., addition of maleic anhydride to terpene hydrocarbons, II, 380.
- Hulubei, H., and Cauchois, (Mlle.) Y., spectra of the true undulatory emission of radon and of its derivatives; rays attributable to element 85, I, 440. Element 93 in the natural state, I, 589.
- Cauchois, (Mlle.) Y., and Cotelte, (Mme.) S., spectroscopic determination of the atomic number of polonium, I, 113.
- Hume, E. M., determination of vitamin-A, III, 400.
- Nunn, L. C. A., Maclean, I. S., and Smith, H. H., essential unsaturated fatty acids and their relationship to fat-deficiency diseases in rats, III, 162.
- Hume, J. F., tensility of the rat's aorta as influenced by age, environmental temperature, and toxic substances, III, 361.
- Hume-Rothery, W., latent heats of sublimation and evaporation of certain substances, I, 603.
- Hummel, B., action of AT 10 in scleroderma, III, 307.
- Hummel, F. C. See Bernstein, S. S., and Hunscher, H. A.
- Hummel, F. F. See Swisher, M. C.
- Hummel, L. E. See Barker, W. H.
- Humperdinck, K., polycythemia or physiologically high values? III, 5. Comparison of haemoglobin determination as reduced haemoglobin or hydrochloric acid haematin, III, 449. Silicosis produced by kieselguhr, III, 782. Danger of lead poisoning in tinplate workers, III, 783.
- Humphrey, R. L., some reasons why the E. B. McLean racehorses headed the list of money winners in 1928, III, 193.
- Humphrey, R. R., sex reversal in *Amblystoma*; reversal in *A. tigrinum* females induced by ectopic implantation of testis preprimordia, III, 684. Growth of gonads derived from heteroplastic transplants of their preprimordia in *Amblystoma*, III, 956.
- Humphreys, C. J., interference measurements in the spectra of the noble gases in the ultra-violet, I, 49. Second spectrum of xenon, I, 166. Pressure displacements in the second spectrum of iron, I, 502.
- Humphreys, R. G., use of the glass electrode at temperatures up to 100°, I, 280.
- Humphreys, S. P., impregnation of perivascular nerves on intracerebral blood vessels, III, 809.
- Hundhausen, G., relations between B_{12} -avitaminosis and gonadotropic pituitary hormone, III, 973. Effect of diminished food intake on thyroid activity, III, 1048.
- and Schulze, E., pituitary and thyroid glands in a B_{12} -avitaminosis, III, 850.
- See also Schulze, E.
- Hung-Chi, C. See Lu, S. S.
- Hungate, R. E., nutrition of *Zootermopsis*. I. Role of bacteria and moulds in cellulose decomposition, III, 398.
- Hungerland, H., delayed insulin absorption in children with circulatory disorders, III, 910. Action of liver extract on insulin hypoglycemia, III, 910.
- Hunscher, H. A., Hummel, F. C., and Macy, J. G., influence of different levels of milk intake on acid-base mineral balances of children, III, 1065.
- Hunt, A. M., evipal novocaine for control of convulsions from novocaine poisoning, III, 312.
- Hunt, H. See Grubb, H. M., Larson, R. G., and Ritchey, H. W.
- Hunt, H. B., blood eosinophil count in asthmatics, III, 448.
- and Woodhouse, D. L., differential serum vanadate sedimentation reaction, III, 8.
- Hunt, M., and Du Vigneaud, V., synthesis of the next higher and lower homologues of *l*-carnosine: γ -aminobutyryl- and glycyl-*l*-histidine, II, 126. Relationship of the structure of *l*-carnosine to its depressor activity, II, 229.
- See also Adams, R., and Du Vigneaud, V.
- Hunt, W. A. See Goldstein, K.
- Hunter, A., enzymic preparation of arginine and ornithine, III, 322.
- See also Gornall, A. G.
- Hunter, A. R., effect of insulin on chronic indolent ulcers, III, 582.
- Hunter, F. R., measurement of permeability constants for water and for a non-electrolyte, using an isosmotic solution, III, 319.
- and Parpart, A. K., solvent water in frog muscle, III, 242.
- Hunter, J. E. See Murphy, R. R.

- Hunter, J. T., anaesthesia in thoracic surgery, III, 313.
See also Dodd, H.
- Hunter, J. W. S. See Lindsley, D. B.
- Hunter, L. See Chaplin, H. O.
- Hunter, M. J., Cramer, A. B., and Hibbert, H., structure of lignin, II, 29.
and Hibbert, H., lignin and related compounds. XLI. Detection, isolation, and determination of the syringyl radical in plant products. XLIII. Absence of the piperonyl group in the lignin structure, II, 56, 516.
See also Cramer, A. B.
- Hunter, R. F. See Desai, R. D.
- Huntington, R. W., simple device for determining approximate oxygen concentration in oxygen tents, III, 825.
- Huntress, E. H., and Moos, G. E., constitution of the so-called "phenoldiphenol," II, 164.
and Seikel, (Miss) M. K., fluorenones and diphenic acids. VI. Ring cleavage of 2-chloro-, 2-hydroxy-, 2-amino-, and 2-sulpho-fluorenones by potassium hydroxide in diphenyl ether. VII. Ring cleavage of 1:8-, 1:6-, and 3:6-dichlorofluorenones with potassium hydroxide in diphenyl ether. VIII. Ring-cleavage of fluorenone-4-carboxylic acids, II, 264, 320, 370.
- Hunziker, F. See Ruzicka, L.
- Hurd, C. D., and Cantor, S. M., analytical separation of various classes of sugars, II, 43.
Cantor, S. M., and Roe, A. S., acetylation of carbohydrates by keten, II, 142.
and Drake, L. R., validity of the structure assigned to cyclooctatetraene: pyrolysis of diquaternary ammonium hydroxides related to Δ^a - and Δ^b -butene, II, 498.
and Filachione, E. M., synthesis of aldehydo-sugars, II, 299.
and Fowler, G. W., alkoxyalkyl derivatives of resorcinol, II, 154.
McNamee, R. W., and Green, F. O., benzoylformic acid from styrene, II, 550.
and Pollack, M. A., mechanisms for the rearrangements of ethers; phenyl γ -ethylallyl [Δ^b -pentenyl] and vinyl γ -ethylallyl ether, II, 137.
- Hurd, L. C., and Hiskey, C. F., determination of rhenium in pyrolusite, I, 100.
- Hurd-Karrer, A. M., relation of sulphate to selenium absorption by plants, III, 1109.
- Hurevitz, H. M. See Feller, A. E.
- Hurlbut, C. S., jun., parahilgardite, a new triclinic-pedal mineral, I, 110. Electric counter for thin-section analysis, I, 281.
and Taylor, R. E., minerals associated with hilgardite [in the Choctaw salt dome], I, 163.
See also Fraser, D. M.
- Hurnhardt, H. See Mumm, O.
- Hurrich, L. M. See Holway, A. H.
- Hurst, A., cancer of the alimentary tract, III, 592.
- Hurst, C. See Allen, W. D.
- Hurst, E. W., myxoma in the fibroma-immune rabbit, III, 70.
- Hurst, L. A. See Vogelenzang, E. H.
- Hurst, W., sensitive differential manometer, I, 161.
- Hurynowicz, J., and Rubinstein, M., effect of blood-sugar level on vestibular chronaxie, III, 905. Effect of calcium, potassium, and magnesium on vestibular excitability, III, 905. Vestibular excitability in experimental anemia, III, 905.
See also Baginski, S.
- Hurxthal, C. M., and Claiborne, T. S., treatment of tetany with dihydrotachysterol (A.T.10), III, 975.
- Huse, G. See Powell, Herbert M.
- Husemann, E., significance of "end-group" determination in polysaccharides, II, 51.
See also Schulz, G. V.
- Hussain, A. See Bhatnagar, S. S.
- Hussein, H. A. See Kirk, R.
- Hussey, R. D. See Strassmann, E. O.
- Hussong, H. E. See Weaver, K. S.
- Huster, E., solutions of sodium in liquid ammonia; magnetism, thermal expansion, state of the dissolved sodium, I, 15.
- Hustin, A., and Reding, R., relations between vasomotor and humoral reactions following injection of protein substances, III, 21.
- Huston, R. C., Fox, W. B., and Binder, M. N., condensation of aliphatic alcohols with aromatic compounds in the presence of aluminium chloride. II. Tertiary aliphatic alcohols and benzene, II, 54.
and Guile, R. L., condensation of aliphatic alcohols with aromatic compounds in the presence of aluminium chloride. IV. *tert*-Dimethylamylcarbinols with phenol, II, 108.
- Hustrulid, A., Kusch, P., and Tate, J. T., dissociation of benzene, pyridine, and cyclohexane by electron impact, I, 114.
See also Kusch, P.
- Huszák, S., changes of the living nerve cell caused by alterations of the pH , III, 29. Mechanism of oxidation in the nervous system, III, 471.
- Hutchins, W. A., Motwani, D. C., Mudbhalkar, K. D., and Wheeler, T. S., chalkones; synthesis of deoxybenzoins from chalkones, II, 24.
and Wheeler, T. S., chalkones; new synthesis of chrysin, apigenin, and luteolin, II, 122.
- Hutchinson, G. E., Deevey, E. S., jun., and Wollack, (Miss) A., oxidation-reduction potentials of lake waters and their ecological significance, I, 283.
- Hutchinson, J. J. See Goettisch, M.
- Hutchinson, R. C. See Clements, F. W.
- Hutchison, A. W. See Weidner, B. V.
- Hutchison, J. H., nutritional anemia in an industrial district, III, 115.
- Hutino, K. See Sakurada, I.
- Hutner, R. A., penumbra of cosmic radiation, I, 175. Penumbra at geomagnetic latitude 20° and the energy spectrum of primary cosmic radiation, I, 296.
- Hutson, J. M. See Hammick, D. L.
- Hutt, F. B., genetics of the fowl. VII. Breed differences in susceptibility to extreme heat, III, 889.
and Ball, L., number of feathers and body size in passerine birds, III, 738.
See also Altmann, M., and Lamoreux, W. F.
- Hutter, H. See Runge, H.
- Hutton, C. O., low-grade metamorphic actinolitic amphibole from New Zealand, I, 48. The stilpnomelane group of minerals, I, 48.
- Hutton, E. L. See Sinton, J. A.
- Huttrer, C. See Lederer, E.
- Huxford, W. S., Townsend ionisation coefficients in Cs-Ag-O photo-tubes filled with argon, I, 291.
- Hwang, J. M. S., Lippincott, S. W., and Krumbhaar, E. B., amount of splenic lymphatic tissue at different ages, III, 121.
- Hwang, Y. See Sallinger, H.
- Hwon, T. L., susceptibility and immunity of different animals to diphtheria toxin, III, 944.
- Hyde, R. R., immunisation to infectious myxomatosis, III, 728.
See also Gardner, R. E.
- Hyde, H. van Z. See Bassett, S. H.
- Hyland, C. M., Conner, J. A., Levinson, S. O., Meader, F. M., and Thalheimer, W., discussion on convalescent serum therapy, III, 512.
- Hyland, H. L. See Clarke, I. D.
- Hyman, C. See Blum, H. F.
- Hyman, H. T., Chargin, L., and Leifer, W., massive dose arsenotherapy of syphilis by the intravenous drip method: five-year observations, III, 864.
- Hyndman, O. L., and Dulan, W. J., superior colliculi: their function as estimated from a case of tumour, III, 570.
- Hynes, M., sternal puncture, III, 810.
- Hynes, W. A., and Yanowski, L. K., application of salts of complex ions to the microscopical detection of anions. V. Nitropentamminocobaltic chloride (xanthocobaltic chloride). VI. Nitritopentamminocobaltic chloride (*isoxanthocobaltic chloride*). VII. Carbonatotetramminocobaltic nitrate, I, 214, 276.
- Yanowski, L. K., and Shiller, M., preparation of monochloropentamminocobaltic chloride (purpureocobaltic chloride), I, 93.

I.

- Iball, J., crystal structure of condensed ring compounds. VII. 3:4-Benzphenanthrene, $C_{18}H_{12}$, and three hexahydro-derivatives, I, 306. Relative potency of carcinogenic compounds, III, 696.
- Ibbs, T. L. See Atkins, B. E.
- Iberty, U. See Castrovilli, G.
- Ichiba, A., and Michi, K., vitamin- B_6 , II, 280. Vitamin- B_6 ; synthesis of 3-methoxy-2-methylpyridine-4:5-dicarboxylic acid, II, 487.
- Ichikawa, N., influence of internal secretion on vitamin-C content of fluid of anterior chamber of eye and organs. I. Influence of spleen and thyroid on vitamin-C content of the fluid of anterior chamber of the eyes of rabbits. II. Influence of prolonged injection of thyrotropic hormones of anterior pituitary on vitamin-C content of the fluid of anterior chamber of eye and of various organs, III, 1047.
- Ichikawa, Z. See Tsuda, K.
- Ichimiya, T. See Nishina, Y.
- Idles, H. A., Low, A. W., Rosen, B. D., and Hart, R. T., determination of carbonyl compounds by means of 2:4-dinitrophenylhydrazine, II, 196.
- Ido, T., and Sakurai, R., occurrence of anthropodeoxycholic acid in pig's bile, III, 595.

- Ievius, A. See Straumanis, M.
- Igarasi, H., metabolic products of *Penicillium funiculosum*. I. Red pigment, fusiculosin. II. Organic acids, II, 271; III, 628.
- Igarasi, J. See Kodama, T.
- Igelsrud, L., Robinson, R. J., and Thompson, T. G., distribution of phosphates in the sea-water of the N.E. Pacific, I, 162.
- Iglauer, A., and Altschule, M. D., effect of exertion on vital capacity of normal subjects, III, 365.
- Iglesias, R. See Lipschütz, A.
- Iguchi, M., spontaneous encephalomyelitis of mice and its virus, III, 632. Neurotropic strain of variola vaccine virus. I. Infections, immunities against intracerebral infection, and mechanism of intranasal infection in rabbit and mouse, III, 796.
- Ihda, T. See Aso, K.
- Ihre, B. J. E., human gastric secretion, III, 954.
- Iida, C., fructose metabolism, III, 173.
- Iida, Y., influence of aliphatic alcohols on the pigment-excreting function of liver and kidneys. I. Effect of ethyl alcohol, III, 149.
- Iijima, S., adsorption of hydrogen on poisoned nickel. I. and II., I, 139, 365. Adsorption of nitrogen on reduced nickel, I, 365.
- Iimori, T., beryllium-bearing variety of allanite, I, 437.
- Ikari, M., respiratory metabolism in pulmonary tuberculosis. I.,—III., III, 564.
- Ikawa, M. See Nishina, Y., and Sagane, R.
- Ikeda, T., and Takeda, S., determination of linalool, cineole, and terpineol, II, 194.
- and Wakatsuki, K., linalool; isomerisation of linalool by heating under pressure. I. Plinol. II. isoPlinol, II, 136.
- See also Kondo, H., and Tomita, M.
- Ikeda, Y., lens formation by cornea in *Hynobius* (*Hy. ummagso*, Tago), III, 835.
- Ikegaki, I., importance of the liver in overdosage of vitamin-A and carotene. II. Function of the liver in overdosage of vitamin-A, III, 918.
- See also Oshima, M.
- Ikert, B., determination of fluorine in wood preservation technique. I. Analysis of fluorides in aqueous solution, I, 383.
- Iki, H., free cysteine and reduced glutathione in liver tumours, III, 990.
- See also Masayama, T.
- Ikin, E. W. See Taylor, G. L.
- Ikoma, I. See Yamada, K.
- Ikusima, M. See Horiuti, J.
- Ilasov, I., creatine, creatinine, and phosphagen contents of seminal fluid, III, 52.
- Ilavsky, J. See Patočka, F.
- Ilfeld, F. W., experimental production of visceral tumours with hydrocarbons, III, 159.
- Iliescu, C., Aubert, H., and Palade, G. E., action of "folinerin" in auricular fibrillation, III, 505.
- See also Solacolu, T.
- Iliescu, I. See Tanasescu, I.
- Iljin, I. V., methyl-red as an indicator in titration of fluorides by thorium salts, I, 38.
- Iljin, N. A., effects of thallium with varying methods of administration, III, 414.
- Iljin, V. S., and Vavshikovskaja, E. I., oxidation coefficient of urine and blood in experimental traumatic shock, III, 459.
- Iljinski, M. A., Gindin, L. G., and Kasakova, V. A., oxidation of alkylanthracenes, alkylanthraquinones, and their derivatives. I. Oxidation with chromic anhydride of 2-methylanthraquinone to anthraquinone-2-carboxylic acid. II. Influence of water on the oxidation of 2-methylanthraquinone to anthraquinone-2-carboxylic acid by chromic anhydride, II, 168.
- Ilković, D., polarisation of quinhydrone electrodes, I, 389. Photo-electric counters with a CuI photo-cathode, filled with ethyl alcohol vapour, I, 493.
- Illari, G., analyses of the saline water containing iodine and alkaline earths from Varano Marchesi (Parma), I, 107. Colorimetric determination of salicylic acid, II, 236. Constitution of nitrospyrrole-black. I., II, 285. Antiketogenic effect of glucose, III, 1078.
- and Beati, S., analysis of mineral water of Pieve di Cusignano (Parma), I, 495.
- and Cattadori, L., thermal water of Corniglio (Parma), I, 584.
- Piana, P., and Lasagni, E., analyses of the mineral waters of Varano Marchesi (Parma). II., I, 495.
- Illényi, A., and Borczsák, L., influence of autonomic [drugs] on hæmolytic production, III, 552.
- and Ludány, G. von, effect of direct splanchnic and vagus stimulation on complement content of serum, III, 434.
- Illic, Z. See Lazarević, M.
- Illig, R. See Lechner, R.
- Illing, E. T., Mohler's test for benzoic acid, II, 505.
- Illing, V. C., factors in oil accumulation, I, 346.
- Illingworth, C. F. W., hæmorrhage in jaundice, III, 650.
- Illingworth, R. S., after-history of premature infants: effect of birth weight on weight chart, III, 764.
- Illner, K. W. See Kroger, C.
- Imagawa, H. See Yamafuji, K.
- Imai, I., action of cholic acids on glycogen formation in the liver, III, 65. Action of cholic acids on ascorbic acid excretion in urine, III, 276.
- Imai, Y. See Mizuta, N.
- Imamura, N. See Ishikawa, F.
- Imanishi, S., spectrum of potassium deuteride, I, 238.
- Imatomi, S., dehydration of hydrated magnesium chloride. I. Mutual relation between potassium and sodium chlorides as addition agents, I, 34.
- Imbesi, A. See De Marco, R.
- Imotani, G. See Takamine, T.
- Imoto, M., action of acetic acid on α -pinene in presence of boron trioxide, II, 169. Action of acetic acid on α -pinene in presence of boron triacetate, II, 220. Action of acetic acid on α -pinene in presence of acetic anhydride and boron trioxide. I. Preparation of borneol. II. Identification of by-products, II, 434.
- Imoto, M., action of acetic acid on camphene in the presence of boric acid or boric trioxide; action of acetic acid on camphene in the presence of boric acid, II, 516. Action of acetic acid on camphene in presence of boracetic anhydride or acetic anhydride and boric trioxide, II, 555.
- Imre, L., radioactive method for determining ionic adsorption at crystal surfaces. I., I, 316. Kinetic-radioactive investigations on the active surface of crystalline powders. II., I, 414.
- Imshenetzki, A., sugar fermentation of cellulose by thermophilic bacteria, III, 726.
- In, M., homology of Schwalbe's gland cells with pancreas cells in rabbits, III, 387.
- Inaba, M., action of harmine on blood coagulation, III, 117.
- Inagaki, K. See Fujimaki, K.
- Inagaki, S., diphenylisatin and its derivatives. III. By-products of dianisylisatin and their oxidation products. IV. Monobromo-compounds of dianisylisatin and their oxidation products. V. Oxidation product of diacetoxyphenylisatin. VI. Ditolyisatin and its oxidation products. VII. Synthetic preparation of phenyldioxindoles and their oxidation products, II, 449.
- Inagawa, H., morphology of the lower jaw. II. Relationships of the mandibular artery and nerve, III, 441.
- Inagawa, S. See Kanao, S.
- Inamura, Y. See Uemura, Taku.
- Inawasiro, K., and Maruta, K., lipid metabolism and its relation to basal metabolic rate on thyrotoxicosis, III, 680.
- Indacoechea, V., preparation of aniline derivatives; hydrosulphiodometric determination of azo-compounds, II, 528.
- Indovina, R., and Capotummino, G., analysis of "carcade" from *Hibiscus sabdariffa*, L., grown in Sicily (Palermo), III, 216.
- and Manfro, F., reducing action of ascorbic acid on mercuric chloride, I, 328.
- Indra, M. K., variation of cataphoretic velocity of silver halides in presence of dyes, I, 321.
- See also Chaudhury, S. G.
- Industrial Health Research Board, report, III, 736.
- Ing, H. R., and Bergmann, M., semi-micro-determination of amino-acids, II, 463.
- and Raison, C. G., alkaloids of *Mitragyna speciosa*. I. Mitragynine, II, 396.
- Ingalls, G. S., induced malaria in a patient without a spleen, III, 328.
- Ingalls, J. K. See Thomas, L. E.
- Ingalls, T. H., infantile scurvy. II. Concentration of ascorbic acid in tissues, III, 851.
- Draper, R., and Teel, H. M., vitamin-C during lactation, III, 1072.
- Ingebrigtsen, B., electromyography in diagnosis of tremor, III, 467.
- Ingelbrecht, M., physiology of mammary gland during gestation, III, 984.
- Ingersoll, A. W. See Dickson, H. L.
- Ingerson, E., albite trends in rocks of the Piedmont, I, 226.
- See also Morey, G. W.

- Ingham, C. E., and Hampson, G. C., steric influences on the phenomenon of resonance, II., 1, 405.
- Ingham, D. W., paradoxical embolism, III, 122.
- Ingle, D. J., capacity of skeletal muscle of castrated female rats for sustaining work output, III, 26. Capacity of skeletal muscle of castrated male rats to sustain work output, III, 26. Effect of cortin on survival and work capacity of rats after removal of intra-abdominal organs, III, 43. Amounts of cortin required to produce adrenal cortical atrophy in male and female rats, III, 260. Effect of administering large amounts of cortin on the adrenal cortex of normal and hypophysectomised rats, III, 260. Time for occurrence of cortico-adrenal hypertrophy in rats during continued work, III, 378. Comparison of resistance of male and female rats to cortin, III, 581.
- and Cragg, R. W., regeneration of auto-grafts of thyroid tissue in partially and completely thyroidectomised rats, III, 579.
- and Fisher, G. T., effect of adrenal-ectomy during gestation on size of adrenal glands of newborn rats, III, 43.
- and Higgins, G. M., influence of genetic relationship on the success of homöoplastic transplants of adrenal glands in albino rats, III, 42. Effect of thyroxine on extent of regeneration in the enucleated adrenal gland of the rat, III, 43. Regeneration of the adrenal gland following enucleation, III, 139. Extent of regeneration of the enucleated adrenal gland of the rat as influenced by the amount of capsule left at operation, III, 477.
- Higgins, G. M., and Kendall, E. C., atrophy of the adrenal cortex in the rat produced by administration of large amounts of cortin, III, 580.
- and Mason, H. L., subcutaneous administration of cortin compounds in solid form to the rat, III, 43.
- Moon, H. D., and Evans, H. M., work performance of hypophysectomised rats treated with anterior pituitary extracts, III, 257.
- See also Flock, E. V., and Higgins, G. M.
- Inglis, D. R., related magnetic moments of light nuclei, I, 237. Angle dependence and range of nuclear forces, I, 401.
- See also Brown, Harrison.
- Ingold, C. K., structure of benzene, I, 183.
- See also Bateman, L. C., Datta, S. C., and Hughes, E. D.
- Ingold, E. H., and Wassermann, A., heavy metal sulphides as catalysts for polymerisation of olefine hydrocarbons, I, 530.
- Ingraham, E. S., and Wartman, W. R., chemotropism of human eosinophilic polymorphonuclear leucocytes, III, 959.
- Ingraham, N. R., jun., complications due to arsenical therapy in syphilitic pregnant woman, III, 864.
- Ingraham, R. C., and Gellhorn, E., role of adrenals in blood pressure reaction to anoxia during insulin hypoglycæmia, III, 976.
- and Vischer, M. B., analyses of gastric mucosa and pancreatic gland tissue of the dog, III, 985.
- Ingram, G., semi-micro-method for determining carbon and hydrogen in organic compounds, II, 193.
- Ingram, W. R. See Evans, B. H.
- Inhoffen, H. H., and Huang-Minlon, conversion of sterols into aromatic compounds. III. Aromatisation of Δ^{14} -cholestadien-3-one, II, 17. Photochemistry of cholestenone, II, 218.
- and Koster, H., sex hormone series. IV. New method of preparing pregnenolone, II, 218.
- See also Hohlweg, IV.
- Inman, O. L., photosynthesis and the living state, III, 340.
- Innes, R. F., screened methyl-orange, I, 428.
- Ino, S. See Okinaka, S.
- Inoue, I., thyroid changes produced by nicotine, III, 908.
- Inoue, K. See Vollmar, H.
- Inoue, Kaoru. See Dunn, R.
- Inoue, Kenjiro, special contraction of partly veratrinised muscle, III, 968.
- Inoue, T. See Sakaguchi, K., and Shiba, H.
- Inouye. See under Inoue.
- Insko, W. M., jun. See Buckner, G. D., and Lyons, M.
- Insua, N. E., pH of the medium used in cultivation of tubercle bacillus, III, 431.
- Insulander, M., relief of pains in childbirth, III, 778.
- Intonti, R., progress in emission spectrum analysis, I, 94. Progress in analysis by emission spectra, I, 156. Spectrographic analysis of [mineral] water of Fonte di Piuggi [Italy], I, 495.
- Introzzi, A. S., experimental hypertension by resection of the carotid-sinus and aortic nerves in rabbits, III, 560.
- Ioanid, N. See Baltaceanu, G.
- Iofa. See under Jofa.
- Ionesco, D., and Zugravescu, I., serum-cholesterol and fat content of tissues in Aujeszky's disease, III, 708.
- Ionesco, N. G., and Constantinesco, P., pellagra, III, 495.
- Constantinesco, P., and Popesco, N., Takata reaction for liver function, III, 914.
- Constantinesco, P., Stoian, I., and Soare, M., stramonium poisoning, III, 715.
- Polatos, G., Constantinesco, P., and Galinsechi, L., treatment of bronchiectasis and chronic lung abscess with intravenous sodium benzoate, III, 306.
- See also Grecou, A.
- Ionesco-Matiu, A., and Popesco, A., determination of uric acid in urine and blood by the phosphotungstic acid and chromometric methods; its condition and transformations; effect of physico-chemical agents, III, 539.
- Popesco, C., and Popesco, A., micro-determination of phenols by the "volume-colorimetric" method, II, 464.
- Ionescu, C. N. See Vintilescu, I.
- Ionescu, V. T. See Balanescu, G.
- Ipatiev, V. N., new catalytic methods of synthesis of hydrocarbons, II, 95. New catalytic syntheses of hydrocarbons, II, 465.
- and Friedman, B. S., reaction of thiol compounds with aliphatic olefines, II, 97. Identification of phenyl alkyl sulphides, sulphoxides, and sulphones, II, 236.
- Ipatiev, V. N., Pines, H., and Friedman, B. S., reaction of aliphatic olefines with thiophenol, II, 17. Reaction of propylene with isoolefines in the presence of sulphuric acid, II, 399.
- See also Corson, B. B., Grosse, A. V., and Pines, H.
- Iransy, E. P., theory of liquid structure, I, 410. Viscosity function. II. Viscosity and constitution, I, 462.
- Irányi, E. See Kolta, E. von.
- Iredale, T., influence of nitric oxide on photo-decomposition of methyl iodide, I, 330.
- Ireland, J. See Lovern, J. A.
- Irish, O. J. See Du Vigneaud, V.
- Irmak, L. R., lyotropic effect of ions on the permeability of living plant cells to sugars, III, 320.
- Irvin, J. L., and Wilson, D. W., octopine. I. Synthesis and titration curve of octopine. II. Nitrogenous extractives of squid and octopus muscle. III. Precursor of octopine in autolysing scallop muscle, II, 144.
- Irvin, J. W., jun., concentrating the uranium isotope of 23-minute half-life, I, 398.
- Irvin, R. J. See McKittrick, D. S.
- Irving, F. C., study of 500 cases of pre-eclampsia, III, 588.
- Irving, J. T., and Richards, M. B., early lesions of vitamin-A deficiency, III, 284.
- and Simpson, B. W., influence of low-iodine diets on thyroid gland of rats, III, 578.
- See also Gaunt, W. E., and Griffith, H. D.
- Irving, L., changes in blood flow through brain and muscles during arrest of breathing, III, 24. Respiration of diving mammals, III, 240. Insensitivity of diving animals to carbon dioxide, III, 366.
- Safford, V., and Scott, W. J., properties of [silver] fox blood for respiratory transport, III, 824.
- See also Black, E. C., and Root, R. W.
- Irwin, D. A., and Gibson, C. S., toxicity of various types of quartz, III, 317.
- See also Riddell, A. R., Sniffen, R. C., and Williams, H. E.
- Irwin, F. See Sandin, R. B.
- Irwin, K. G., periodicity patterns of the elements, I, 547.
- Irwin, M. H., Weber, J., Steenbock, H., and Godfrey, T. M., influence of hydrogenation and oxidation of fats on their rate of absorption, III, 388.
- See also Weber, Janet.
- Irwin, M. R., Beach, B. A., and Bell, F. N., bactericidal action of bovine whole blood and serum towards *Brucella abortus* and *B. suis*, III, 1011.
- and Cole, L. J., immunogenetic studies of species and of species hybrids in doves: separation of species-specific substances in the back-cross, III, 889.
- Irwin, W. B. See Smith, L. I.
- Isaacs, B. L., Jung, F. T., and Ivy, A. C., vitamin-A deficiency and dark adaptation, III, 284.
- Isaacs, R., Bethel, F. H., Riddle, M. C., and Friedman, A., standards for red blood cell increase after liver and stomach therapy in pernicious anaemia, III, 228.
- and Friedman, A., standards for maximum reticulocyte percentage after intramuscular liver therapy in pernicious anaemia, III, 228.

- Isaacs, R. See also Friedman, A., and Sturgis, C. C.
- Isac, C., Matthes, K., and Yamanaka, T., transport of oxygen in human blood. I. and II., III, 24.
- Isacescu, D. A. See Nenitzescu, C. D.
- Isaev, B., application of a proportional amplifier to X-ray structure analysis, I, 456.
- See also Dobrotin, N.
- Isambert, Y. See Montagne, M.
- Isbell, H. S., action of baker's yeast on *d*-talose, III, 724.
- and Pigman, W. W., β -*d*-2-deoxygalactose, II, 300.
- Ischtschenko, I. N., clinic of traumatic shock, III, 364.
- Iseki, T., and Sugiura, T., sugar-amino-acid compounds, II, 518. Hydroxymethylfurfuraldehyde derivatives of high mol. wt., II, 518.
- Isemura, T., rhythmic precipitates, I, 470. Oiliness of liquids. VII. Static frictional coefficients of esters, ketones and glycerol. VIII. Measurements of static friction coefficients for silver surfaces, I, 516.
- Isenberg, N. See Kammer, A. G.
- Isenberger, R. M., and Tyler, M. W., action of potassium salts on isolated kidney of dog, III, 693.
- Isenhour, C. E. See Dill, L. F.
- Isensee, I. See Hahn, A.
- Ishida, Y., Tamaru, T., and Kamijima, G., Stark effect of the Ne II spectrum, I, 393.
- Ishidate, M., micro-chemical detection of *o*-diketo- and hydroxymethylene compounds, II, 43.
- Ishihama, M., thermochemical studies on enzyme action, III, 195.
- Ishihara, K., 2:8-dialkoxy-10-alkylacridinium derivatives with various kinds of amino-groups on the 5-carbon atom. XVII. Synthesis of 5-*o*-aminoanilino-2:8-dialkoxy-10-alkylacridinium derivatives and 5:5'-*o*-phenylenebis-(amino-2:8-dimethoxy-10-methylacridinium hydroxide). XVIII. Synthesis of the hydrochlorides of 5-*m*-aminoanilino-2:8-dialkoxy-10-alkylacridinium chlorides and 5:5'-phenylenediamino-compounds combined with various kinds of acridinium derivatives. XIX. Relation between 2:8-dialkoxy-*N*-alkylacridones and solvents, II, 86.
- Ishii, Migaku, clinical observations on the effect of the vitamin-B complex from liver on tubercular patients. III. Physical strength of the patients, III, 919.
- Ishii, Minoru, and Oshima, Y., ethereal extract of bark of Cajaput tree, II, 556.
- See also Yamamoto, R.
- Ishii, R. See Kato, Sechi.
- Ishii, S. See Nakatani, M.
- Ishikawa, F., and Atoda, T., parachors of binary mixtures, I, 312.
- and Hijikata, K., thermal conductivities of binary gas mixtures, I, 429.
- and Imamura, N., thermal conductivity of the system H₂-HCl and equilibrium in the reduction of cuprous chloride by hydrogen, I, 523.
- and Sato, Hachiro, stabilisation velocity of glassy selenium, I, 308.
- Ishikawa, S., and Kuroda, E., m.p. curve of esters of the dihydroxystearic acid from castor oil, II, 404.
- Ishikawa, S., and Matsubashi, M., catalytic synthesis of anisole and *p*-tolyl methyl ether, II, 416.
- and Miyata, A., aldehydic perfumes. II. Synthesis of pelargonaldehyde, II, 406.
- and Takeuchi, H., Perkin reaction. IV. Condensation of carboxylic acids and aldehydes, II, 112.
- Ishikawa, T., reduction-oxidation potential, III, 421.
- Ishimaru, K. See Naito, H.
- Ishisawa, M., cellular centre of principal cells of fundic glands of the stomach, III, 386. Ganglion cells in mucous membrane of human small intestine, III, 842. Nerve ganglia in mucous membrane of human small intestine, III, 986.
- Ishizaka, O., determination of oxygen in air, I, 429. Volumetric microchemistry. I. Neutralisations and acidimetry, I, 486.
- Ishihama. See under Ishihama.
- Isikawa. See under Ishikawa.
- Isisawa. See under Ishisawa.
- Iskoldski, I. I., volatility of salts with steam, I, 364.
- Isküll, E. W. See Agafonova, T. N.
- Isler, H. See Hartmann, M.
- Isler, O., stabilisation of *dl*- α -tocopherol, III, 169.
- See also Demole, V.
- Ismailski, V. A. See under Izmailsky, V. A.
- Isomura, Y., effect of silent electric discharge on synthesis of monochloroacetic acid, II, 492.
- Isono, S., influence of vitamin-C on Arakawa's reaction, III, 696.
- See also Sato, S.
- Israel, R. See Vallery-Radot, P.
- Israels, M. C. G., myeloblasts in chronic myeloid leukaemia, III, 349. Pathological significance of megaloblast, III, 811.
- Issagulantz, F. I., and Serebrennikov, G. A., isomerisation of geranyl acetate, II, 531.
- Issartel, R. See Polonovski, M.
- Issekutz, B., effect of tetracolor [penta-methylenetetrazole] and *p*-methyl-tetracolor [on central nervous system], III, 470.
- Issekutz, B. von, jun., action of β -hydroxy-phenylisopropylamines, III, 930.
- See also Havemann, R.
- Issler, A., and Demole, M., effect of saturation with vitamin-C on gastric juice, III, 852.
- See also Demole, M.
- Istrati, G., evaluation of antitoxic dysentery (Shiga-Kruse) sera by flocculation method, III, 429.
- and Olaru, A., comparative titration of anti-dysentery, anti-Shiga serum by the flocculation method and the "standard" international method on mice, III, 103.
- Isupov, V. S., action of hydriodic acid on cycloglycylglycine [diketopiperazine] and biological significance of product obtained, II, 451.
- Itagaki, C. See Mitsuba, K.
- Itallie, L. van, colour reaction for sulphur, I, 156.
- Itano, A., and Tsuji, Y., nodule bacteria. XII. Influence of iron compounds on nodule bacteria of *Astrogalus sinicus* (Genge), III, 1099.
- Itaya, S. See Oshima, K.
- Itikawa, Z. See Ochiai, E.
- Ito, H., influence of kidney nerves and blood transfusion on iodine excretion by the kidney, III, 153. Influence of kidney damage on iodine excretion by the kidney, III, 153.
- Ito, Hiroshi. See Yamamoto, R.
- Itô, K. See Amagasa, M.
- Ito, T., and Aoki, S., Golgi apparatus of ganglion cells in submaxillary gland of dog, III, 889.
- Ito, Takeo, and Komori, K., sericin. III.—V., III, 488, 597.
- Ito, Tei-ichi, determination of lattice constants of triclinic crystals from one crystal setting: special case, I, 407. Existence of a monoclinic soda-felspar, I, 436.
- Itô, Tunesô. See Aoyama, S.
- Itterbeek, A. van, liquefaction of helium, I, 339.
- [with Dingenen, W. van], liquefaction of helium, I, 537.
- and Claes, (Miss) A., viscosity of hydrogen and deuterium gas between 293° and 14° K., I, 15, 68. Viscosity of oxygen in a magnetic field at very low pressures, I, 68.
- De Bruyn, P., and Mariëns, P., absorption of sound in CO₂ gas, in CO₂ containing small quantities of H₂, D₂, H₂O, D₂O, and in mixtures of CO₂ and O₂; collision efficiencies, I, 409.
- and Paemel, O. van, viscosity of argon at room temperature and between 90° and 55° K., I, 68.
- See also Dingenen, W. van.
- Ittyoda, K. See Kaku, T.
- Itzerott, D., germination and growth of *Ustilago zea* (Beckm.), Ung., with special reference to infection, III, 872.
- Iuracec. See under Juracec.
- Ivanenko, D., simple applications of the Proca potential, I, 176. Classical dynamics of the meson, I, 447.
- Ivannikov, P., compressed catalysts, I, 377.
- Ivanoff, (Mlle.) N. See Auger, V.
- Ivanov, A. V. See Poljakov, V. D., and Sinelnikov, K. D.
- Ivanov, D. See Reichert, B.
- Ivanov, K., organic peroxide formed during the decomposition, by oxidation, of saturated hydrocarbons, II, 95.
- Ivanov, N. M., use of piezo-quartz for registration of rapidly varying pressures, I, 105. Biochemical production of citric acid, III, 100.
- Ivanova, M. I. See Ushakov, M. I.
- Ivanova, N. See Dobrotin, N.
- Ivanova, N. S., penetrating component of cosmic radiation and Rossi curve, I, 175. Soft shower-producing component of cosmic radiation, I, 175.
- Ivanova, V. See Rogovin, Z.
- Ivanova, V. A. See Bogdanov, S. V.
- Ivanovics, J., and Bruckner, V., serological analysis of antianthrax sera by means of synthetic azoantigens, III, 524.
- Iveronova, V. I., and Schdanov, H. S., X-ray study of recrystallisation of copper and α -brass, I, 517.
- Ives, G. See Alexander, W.
- Ives, H. E., and Briggs, H. B., optical properties and photo-electric emission in thin films of alkali metals, I, 2.
- Ives, R. F., hemolytic streptococcal angina with agranulocytosis treated with prontosil, III, 305.

- Ivy, A. C. See Beazell, J. M., Boylston, G. A., Bussabarger, R. A., Carryer, H. M., Culmer, C. U., Doublet, H., Gray, J. S., Greene, R. R., Greengard, H., Isaacs, B. L., Kocom, E. J., and Schnedorf, J. G.
- Iwadare, K., preparation of *d*-erythrose, II, 299.
- Iwanowska, J. See Truszkowski, R.
- Iwasé, K., and Fukusima, M., absorption of hydrogen and nitrogen by pure iron, I, 139.
- See also Oyama, Y.
- Iwata, M., Ugami, S., and Susuki, S., biological activities of methyl-dihydro-testosterone, a synthetic male sex hormone. II. Effects on inseminating potency of the senile rat, III, 142.
- Iwatsuru, R., Minami, Y., and Nanjo, K., phosphatase. XI. Blood- and serum-phosphatase in eosinophilia, III, 788.
- and Nanjo, K., phosphatase. VIII. Phosphatase of blood, serum, and urine in chronic myelitic leukæmia. IX. Effect of ultra-violet, infra-red, and X-rays on phosphatase. X. Effect of organic dyes on phosphatase, III, 626, 788.
- See also Kozawa, S.
- Iyengar, A. V. V., spike disease in sandal (*Santalum album*, L.). XIX. Physiological and physical methods of characterising the disease, III, 109.
- Determination of manganese in plants, III, 1019.
- See also Rajagopal, S.
- Iyengar, K. V. See Rao, B. S. M.
- Iyengar, N. K., Sehra, K. B., and Mukerji, B., protease of cobra venom, III, 323.
- See also Mukerji, B.
- Iyengar, N. V. R., and Rao, B. S., interfacial tension studies on mercury in reacting systems, I, 562.
- Izard, Y. See Boivin, A.
- Izmailov, N. A., and Belgova, M. A., potential of a glass electrode in aqueous alcoholic solutions, I, 267.
- Differentiating action of solvents on the strength of acids. I. Potentiometric titration of salts by the displacement method, in differentiating solvents, II, 462.
- Schustova, M. B., and Vodorez, N., differentiating action of solvents on the strength of acids. II. Separate potentiometric titration of mixtures of acids with high dissociation coefficients, in differentiating solvents, I, 523.
- Izmailski, V. A., and Popov, B. V., alkylation. VI. Hydrolysis of ethyl chloride by alkalis, I, 85.
- and Smirnov, E. A., separated auxo-enoid systems. V. Coloration of nitrobenzoyl derivatives of aromatic amines. VIII. Colour of *p*-nitrophenylacetyl-amides. IX. Colour of β -*p*-nitrophenylpropionarylamides, II, 212, 263.
- and Stavrovskaja, V. I., separated auxo-enoid systems. VI. Coloration of nitrobenzyl derivatives of aromatic amines. VII. Influence of a second auxo-group on coloration of nitrobenzylarylamines, II, 414, 541.
- Izumi, F. See Tsuji, S.
- J.
- Jaanus, R., and Schur, J., influence of heat treatment in a magnetic field on the magnetic properties of ferromagnetic single crystals, I, 130.
- Jablczyńska-Jędrzejewska, H., and Chrostowski, W., poisoning and reactivation of hydrogen electrodes, I, 266.
- Jablczyński, K., Obrębski, S., and Przygoda, O., influence of non-electrolytes on velocity of coagulation of colloidal antimony and arsenious sulphides, I, 261.
- Jablonowski, H. See Schenk, P. W.
- Jabłońska, H., crystallisation velocity of tin, I, 184.
- Jablónski, A., wave mechanical treatment of [pressure] broadening of [spectral] lines. II, I, 50.
- See also Horodniczy, H.
- Jablonski, W., and Meyer, H., occurrence of wandering cells in cultures of nervous tissue *in vitro*, and changes in their form in various media, III, 251.
- Jacek, W., velocity of solution of comminuted substances. VIII. Solution of potassium sulphate in water. IX. Solution of alums. X. Solution of tartaric acid and sugar in water. XI. Velocity of solution of alabaster in water, I, 270, 328, 527.
- Jachimsky, H., influence of the medium on explanted tumour tissue, III, 889.
- Jacini, G., ethyl acetonediacboxylate. II, II, 35. Extension of the Conrad-Limpach reaction to the *p*-phenanthroline series, II, 286. Reaction between *m*-phenylenediamine and ethyl acetoacetate, II, 452.
- Jackson, A. V. See Burnet, F. M.
- Jackson, C. M., abnormally rapid increase in weight on refeeding after a period of growth suppression, III, 737.
- Jackson, D. A. See Blumberg, H.
- Jackson, D. E., and Jackson, H. L., actions of camphor-tetrazole and metrazol in schizophrenic psychoses, III, 35.
- Jackson, E. L., and Hudson, C. S., periodic acid oxidation of β -methyl-*D*-mannopyranoside, II, 244. Periodic acid oxidation of α -trehalose, II, 408.
- Jackson, (Miss) E. M. See Falconer, R.
- Jackson, H., hydrogenation technique, I, 46. Oxidation of pyrocatechol and 1:2:4-trihydroxybenzene by polyphenol oxidase, III, 1008.
- Jackson, H., jun., agranulocytosis following the ingestion of causalin, III, 4. Protean character of leukæmias and of leukæmoid states, III, 549.
- and Tighe, T. J. G., analysis of treatment and mortality of 390 cases of acute agranulocytic angina, III, 891.
- Jackson, H. C. See Collier, F. A.
- Jackson, H. L. See Jackson, D. E.
- Jackson, J. See Haworth, W. N.
- Jackson, L. C., principal magnetic susceptibilities of neodymium sulphate octahydrate at low temperatures, I, 308.
- Jackson, M. W. P., and Thoday, D., differentiation [in plants]. VI. Distribution of calcium malate and other solutes in stems and leaves of succulent *Compositae*, III, 799.
- Jackson, R., and Quarrell, A. G., electron-diffraction by the split-shutter method and a new back reflexion method, I, 44.
- Apparatus for electron-diffraction at high temperatures, I, 340.
- Jackson, R. B., taking photomicrographs with the aid of a simple and inexpensive apparatus, I, 42.
- Jackson, R. L., and Boyd, J. D., relative efficiency of commercial forms of insulin, III, 1050.
- Jackson, R. L., and Frayser, L., effect of acacia on the blood, III, 651.
- See also Boyd, J. D.
- Jackson, R. W., and Cahill, W. M., racemisation of amino-acids on acetylation with keten, II, 36.
- See also Cahill, W. M.
- Jackson, S. H. See Snelling, C. E.
- Jacob, (Miss) A., Steiger, (Miss) M., Todd, A. R., and Work, T. S., vitamin-E. VI. Synthesis of lower homologues of α -tocopherol, II, 274.
- Jacob, H., death from insulin-shock therapy, III, 910.
- Jacob, J. P. See Briner, E.
- Jacob, S., isoagglutinins are contained in globulin fraction of blood-serum, III, 7.
- Jacobi, A., diagnosis of schizophrenia by Lehmann-Facius cerebro-lipoid reaction, III, 32.
- Jacobi, H. P. See Baumann, C. A.
- Jacobi, J., and Tigges, F., experiments with AT 10, III, 715.
- Jacobi, L., blood pressure action of fowl post-pituitary extract in chicken, III, 840.
- Jacobs, A. L. See Boland, C. R.
- Jacobs, H. R., nature of anti-pernicious anemia principle; isolation of choline, III, 116. Peroxidase-like activity of alloxan and aldehyde, III, 196.
- Jacobs, J. D., and Laqueur, E., isolation of a keto-lactone from the urine of pregnant mares, II, 119.
- Jacobs, M. D. See Soffer, L. J.
- Jacobs, M. L., and Lloyd, W. R., phytochemistry of *Kalmia angustifolia*, L., III, 950.
- Jacobs, R. B., and Starr, C., thermal conductance of metallic contacts, I, 339.
- Jacobs, W. A., and Craig, L. C., delphinine. I. and II, II, 190, 350. Ergot alkaloids. XVII. Dimethylindole from dihydrolysergic acid, II, 396.
- Elderfield, R. C., and Craig, L. C., aconite alkaloids. II. Formula of oxonitine, II, 350.
- and Gould, R. G., jun., ergot alkaloids. XVI. Synthesis of substances related to lysergic acid; 6-methylergoline and ergoline-7-carboxylic acid. XVIII. Production of a base from lysergic acid; its comparison with synthetic 6:8-dimethylergoline, II, 42, 525.
- See also Craig, L. C., and Gould, R. G., jun.
- Jacobsen, C. F., effects of extirpations on higher brain processes, III, 970.
- Jacobsen, E., action of 4:4'-dihydroxy- α -diethylstilbene on the pituitary of castrated rats, III, 146. Action of phenyl-substituted aliphatic amines on body temperature, III, 504. Subjective effects of cephalotropic amines in man. II. Comparison between β -phenylisopropylamine and series of other amines, III, 1037.
- Christensen, J. T., Eriksen, F., and Hald, J., anaesthetic action of sympathomimetic amines, III, 88.
- and Wollstein, A., subjective effects of cephalotropic amines in man. I. β -Phenylisopropylamine, III, 1037.
- Wollstein, A., and Christensen, J. T., action of amines on central nervous system, III, 508.
- Jacobsen, O. See Linderstrøm-Lang, K.
- Jacobsen, R. P. See Fieser, L. F.
- Jacobsohn, D. See Westman, A.

- Jacobsohn, K. P., and Da Cruz, A., enzymic activity of organs in pathological conditions, III, 196. Enzymes of the defensive system, III, 322.
- and Soares, M., specificity of the enzymes deaminising *d*-amino-acids, III, 322. p_H of the medium of fumarico-aminase, III, 322. Structural specificity of aconitase, III, 940.
- and Tapadinhas, J., enzymic hydration of aconitic acid, III, 422. Distribution of aconitase, III, 940.
- See also Da Cunha, D. P.
- Jacobson, E., blood pressure and skeletal muscle tension, III, 362.
- Jacobson, H. F. See Freed, S., and Rosenbaum, E. J.
- Jacobson, H. P., immunotherapy for coccidioid granuloma, III, 1099.
- Jacobson, L. E. See Fricke, H.
- Jacobson, S. A. See Sutro, C. J.
- Jacobson, W., argentine cells and pernicious anaemia, III, 811.
- Jacoby, A. See Kornblith, B. A.
- Jacoby, A. L., sulphur analogues of furan types, II, 279.
- See also Gilman, H.
- Jacoby, G., treatment of rickets with vitamin-D₂ and -D₃ concentrates, III, 169.
- Jacotot, H., nature of tissue emulsions used as vaccines in virus diseases, III, 432.
- Jacques, A. G., kinetics of penetration. XV. Restriction of the cellulose wall. XVI. Accumulation of ammonia in light and darkness. XVII. Exit of ammonia in light and darkness. XVIII. Entrance of water into impaled *Halicystis*. XIX. Entrance of electrolytes and of water into impaled *Halicystis*. XX. Effect of p_H and of light on absorption in impaled *Halicystis*, III, 210, 634, 1007, 1108.
- Jacquinet, P., intercombination lines in the spectrum of helium, I, 439.
- See also Couder, A.
- Jacquot, R., and Lindenberg, A., distribution of aliphatic alcohols between the cell fluid of aquatic animals and the surrounding water; mol. wt. and surface activity, III, 916. Distribution of fatty alcohols between external medium and tissue fluids of aquatic animals; effect of salt concentration of external medium, III, 938.
- and Raveux, R., effect of concentration of nutrient substances on plants grown in the dark, III, 211.
- Jadassohn, W., problems of sex hormones, III, 583.
- Uehlinger, E., and Margot, A., the nipple test; studies in the local and systemic effects on topical application of various sex hormones, III, 54.
- See also Fierz-David, H. E.
- Jadhav, G. V., and Sukhtankar, D. R., interaction of sulphury chloride with arylamides of aromatic acids. I, II, 263.
- See also Hirwe, N. W.
- Jäger, A., abnormal renal blood vessels in the frog, III, 345.
- Jager, F. See Jager, R.
- Jäger, F. (Berlin). See Baukloh, W.
- Jaeger, F. M., Bottema, J. A., and Rosenbohm, E., exact measurement of specific heat of metals at high temperatures. X. Specific heat, electrical resistance, thermo-electrical behaviour, and thermal expansion of electrolytic iron, I, 133.
- Jaeger, J. C. See Carslaw, H. S.
- Jäger, R., and Jäger, F., surface structure of the skin; method of examining it and its importance in industrial hygiene, III, 1094.
- Jaeger, W. See Karrer, P.
- Jänecke, E., ternary systems of liquids showing component separation phenomena, I, 322. System cadmium-tin-thallium, I, 559.
- [with Neundenbel, L., and Rumpf, ternary alloys containing magnesium and cadmium and the equilibrium diagram of binary magnesium-cadmium alloys. I. and II., I, 70, 252.
- Jaensch, W., and Doerbecker, H. J., tetany and spasmodophilia, III, 477.
- Jäntti, O., automatic pouring device for [uso in] filtrations, I, 224.
- Järvinen, See Sihvonen, V.
- Jaffe, H. L. See Master, A. M.
- Jaffé, J. See Timmermans, J.
- Jaffé, W. See Karrer, P.
- Jager, F. C., and Jakulev, M. S., condition of starch in potato at different stages of tuber ripening, III, 950.
- Jagić, N. von, and Zimmermann-Meinzigen, O. von, total thyroidectomy in cardiac and circulatory diseases, III, 361.
- Jagielski, A. See Dobinski, S.
- Jaglenski, T. See McCullagh, D. R.
- Jahiel, R., and Nectoux, R., sensitisation of the conjunctiva, III, 512.
- Rosen, M., and Morel, R., pulmonary anaphylaxis caused in rabbit by its own urine, III, 935.
- Uzan, M., Nogoraze, D., and Lefebvre, J., organ anaphylaxis, III, 1006.
- Jahn, D., body changes in endogenous psychoses, III, 248. Liver metabolism in constitutional diseases and those of the central nervous system, III, 691.
- Jahn, E. See Mills, J. H.
- Jahn, F. P., theory of absolute reaction rates and polymerisation of ethylene, I, 326.
- and Taylor, H. A., thermal decomposition of azomethane in presence of nitric oxide, I, 476.
- See also Taylor, H. A.
- Jahn, H. A., Coriolis perturbation in the methane spectrum. I. Vibrational-rotational Hamiltonian and wave functions. II. Energy levels. IV. Four general types of Coriolis perturbation, I, 119, 552. Coriolis coupling terms in polyatomic molecules, I, 599.
- See also Childs, W. H. J.
- Jahn, T. L., and Crescitelli, F., electrical response of the moth eye, III, 376.
- See also Crescitelli, F.
- Jahnel, F., survival of trypanosomes and recurrent spirochetes after freezing at -269.5° , III, 427.
- Jahnel, H., electrolyte concentration of the transpiration stream [in trees], III, 435. Distribution of growth substance in *Lupinus albus* during the vegetative season, III, 637.
- Jahns, R. H., Clerici solution for determination of sp. gr. of small mineral grains, I, 281.
- Jahoda, M. See Fejfer, J.
- Jailer, J. W., mitotic index of hyperplastic interstitial cells of the guinea-pig, III, 268.
- Jaitschnikov, I. S., and Solntzev, A. I., proteins of *Dactylis glomerata* seeds, III, 218.
- Jáke, rôle of vitamin-A in urinary stone formation, III, 285.
- Jakob, A., formation of porphyrins by bacteria, III, 793, 947.
- Jakób, W. F., and Cyrus-Sobolewski, L., quadrivalent molybdenum. III. Oxy-chloromolybdous acid; stability of acid solutions of quadrivalent molybdenum, I, 274.
- and Schmidtgal, E., quadrivalent molybdenum. IV. Decomposition of molybdo-octacyanic acid; dicyanic acids, I, 274.
- Jakovleva, A., photodissociation of ICN and BrCN molecules and transfer of rotational energy on collision of the CN radical with foreign molecules, I, 178. Fluorescence of the CN radical from the photodissociation of cyanogen molecules, I, 597.
- Jakubovitsch, A. J. See Scherlin, S. M.
- Jakubson, S. I., and Dumarevskaja, V. M., decomposition potential of sodium and potassium halides in ethyl bromide solutions of aluminium bromide. I., I, 83.
- See also Plotnikov, V. A.
- Jakulev, M. S. See Jager, F. C.
- Jalavisto, E., Keränen, L., and Seppälä, I., after-effects of skeletal muscle-contraction, III, 662.
- See also Airila, K.
- Jalota, R. S. See Bakshi, H. S.
- Jalow, B., heterogeneous regeneration of nerve endings in touch hair, III, 128. Development of nerve endings in human skin, III, 1022.
- and Maleczynski, S., effect of the increase in blood-cholesterol due to infra-red irradiation on modifications in the skin, III, 119.
- James, F. L. [with Lyons, R. E.], rearrangement in the benzoin series, II, 69.
- James, G. V., occurrence of cyanogenetic substances in edible members of the Cruciferae, III, 951.
- James, H. M., and Coolidge, A. S., continuous spectra of H₂ and D₂, I, 165.
- and Johnson, V. A., electron distribution in zinc oxide crystals, I, 513.
- and Yost, F. L., wave functions for $1s2s^2S\text{ La}^+$, I, 6.
- See also Coolidge, A. S.
- James, H. R. See Clarke, G. L.
- James, N., and Sutherland, M. L., accuracy of the plating method for estimating numbers of soil bacteria, actinomycetes, and fungi in the dilution plated, numbers of bacteria and fungi from one dilution and from one aliquot of a laboratory sample of soil, III, 1015.
- See also Sutherland, M. L.
- James, R. G., amphibian digestive system. III. Origin and development of pancreatic islands in *Anura*, III, 806.
- James, T. H., reduction of silver ions by quinol, I, 270. Mechanism of development. I. General effect of oxidation products on development process and the nature of the induction period, I, 425. Reduction of silver ions by hydroxylamine, I, 572.

- James, T. H., and Weissberger, A., oxidation processes. XIII. Inhibitory action of sulphite and other compounds in the autoxidation of quinol and its homologues, II, 153.
- James, W. A., Hollingshead, E. A., and Gordon, A. R., differential diffusion constants of hydrochloric and sulphuric acids, I, 192.
- James, W. O., glycolysis in barley, III, 339.
- Jameson, E., and Alvarez-Tostado, C., qualitative separation of proteins of rat serum by electrophoresis, III, 961.
- Jameson, W. T. See McBain, J. W.
- Jamieson, W. A. See Powell, Horace M.
- Jamsett, R. A. See German, W. L.
- Jamuni, A., and Ellis, A. G., congenital absence of left lung, III, 223.
- Jan, A., biological reduction of ammonium molybdate by bacteria of the genus *Serratia*, III, 1102.
- Janbikov, J. M., action of various reagents on trimethyleneimine, II, 279. Synthesis of trimethyleneimine, and the products of the reaction between *p*-toluene-sulphonamide and $\gamma\gamma$ -dibromopropane, II, 279.
- Janczak, W., centigram (semi-micro-) analysis of minerals. VI. Determination of iron, sulphur, and copper in chalcopyrite, I, 279.
- Jander, G., chemistry [of substances dissolved] in sulphur dioxide, I, 68. Reactions between solid phases, I, 273. and Mesech, H., chemistry in liquid sulphur dioxide. VIII. Sulphur dioxide solvates. IX. Electrical conductivity and dissociation of materials dissolved in liquid sulphur dioxide. X. Mol. wt. and association of materials dissolved in liquid sulphur dioxide, I, 68, 137.
- Jander, W. [with Herrmann, Heinz], reactions in the solid state at high temperatures. XXIII. Theory of active structures which arise at beginning of a reaction in the solid state, I, 380. and Bunde, K., reactions in the solid state at high temperatures. XXI. Formation of magnesium titanates from oxides in the solid state, I, 36. and Fett, R., hydrothermal reactions. II. Magnesium hydrosilicates, I, 612. and Leuthner, G., reactions in the solid state at high temperatures. XXII. Intermediate states which occur in formation of magnesium titanate from magnesium oxide and titanium dioxide in the solid state, I, 331.
- Janes, J. M., method of pancreatotomy in pigeons, III, 914. See also Banting, F. G., and Loughheed, D. W.
- Janes, R. G., and Segaloff, A., growth and maturation of anuran larvae on thymus extracts, III, 39.
- Janeway, C. A. See Chandler, C. A., and Fox, C. L., jun.
- Jang, C. S. See Gaddum, J. H.
- Janicki, J. See Chrzasczek, T.
- Janis, A. A., and Ferguson, J. B., sodium chloride solutions as an isopiestic standard, I, 566.
- Janke, A. [with Bacher, A., Garzuly-Janke, R., and Szilvinyi, A. von], action of radon and of Gastein thermal water on micro-organisms, III, 531. and Mikschik, E., micro-method for potentiometric formaldehyde titration, II, 490.
- Janke, W. See Müller, Eugen.
- Jannetti, D. See Donatelli, L.
- Jannke, P., phenyl- and naphthyl-urethanes and the corresponding disubstituted carbamides, II, 415.
- Jánossy, L., relation of shower frequency to general cosmic-ray intensity, I, 5. Penetrating power of cosmic-ray shower particles, I, 175.
- Janot, M. M., and Cionga, E., catuabob obtained from the bark of catuabach (*Trichilia spec.*), II, 81.
- Janovski, D. N., theory of hæmatopoiesis in the light of clinical data, III, 115.
- Janse, L. C., suction plant for fume cupboards, I, 223.
- Jansen, B. C. P. See Dols, M. J. L., and Westenbrink, H. G. K.
- Jansen, W. H., and Weber, Josef, treatment of cough with drug combinations, III, 713.
- Janson, J. J., conductivity of apolar amorphous substances, in the softening zone, I, 405.
- Janssen, L. W., virus problem: foot and mouth disease, III, 1104.
- Janssen, S., mistletoe, III, 189. Critical survey of hormone therapy, III, 255.
- Jansson, I. J. See Salmi, E. J.
- Jantzen, E., and Haker, W., high-efficiency distillation column for the laboratory, I, 582.
- January, D. A. See Hirsheimer, A.
- Janzen, R., changes of the electrocardiogram during the change from recumbent to vertical position, III, 17.
- Jaquero, A., classification of atomic masses, I, 351.
- Jaques, L. B., effect of intravenous injections of heparin in the dog, III, 450.
- Jaretsky, R., Breitwieser, K., and Neuwald, F., diuresis in rats dosed with silica and siliceous drugs, III, 507. and Lindner, W., difficulties in detection of saponins by the blood-gelatin method, III, 511. and Neuwald, F., pharmacological comparison of the oils of *Maticaria chamomilla*, L., and *M. discoidea*, L., III, 512. Diuretic action of volatile oil of *Ononis* root in rats, III, 1003. and Punzel, W., standardisation and stabilisation of drugs of the *Filix* group, III, 506.
- Jarisch, A., pharmacology of mistletoe, III, 617. and Henze, C., action of mistletoe extracts on liver volume, III, 506. and Richter, H., Bezold effect: a forgotten action of veratrine on the heart, III, 657.
- Jarkovaja, L. M., changes in content of growth substances [in plants] due to interruption of dormancy, III, 949.
- Jaroschka, K., effect of ascorbic acid on development of premature infants, III, 288.
- Jaroszówna, S. See Glizelli, S.
- Jarotzky, A. I., arterial hypertension, III, 658.
- Jarrell, O. W. See Palache, C.
- Jaski, C. J., oestrous cycle [and copulation] in *Lebistes reticulatus* (Petus), III, 479.
- Jasper, H. H., and Bradley, C., electroencephalographic analyses of behaviour problem children, III, 669. Solomon, P., and Bradley, C., electroencephalographic analyses of behaviour problem children, III, 248.
- Jass, H., and Hanemann, H., system iron-iron silicide (FeSi)-graphite, I, 18.
- Jatkar, S. K. K., supersonic velocity in gases and vapours. II. Supersonic satellites in vapours. III. Volume resonance in a supersonic interferometer. IV. Measurement of the absolute frequency of piezoelectric quartz oscillators. V. Specific heats of vapours of acetone, benzene, cyclohexane, *n*-hexane, methyl, ethyl, and *n*-propyl ethers. VI. Specific heats of the vapours of alcohols and ethyl acetate. VII. Specific heats of the vapours of dichloromethane, chloroform, carbon tetrachloride, and ethylene dichloride. VIII. Supersonic velocity in air, steam, carbon dioxide, and carbon disulphide, I, 161, 189, 248, 309. and Gagendragad, N. G., esterification equilibrium in vapour phase; equilibrium between methyl alcohol, acetic acid, methyl acetate, and water, I, 199. and Valvekar, R. K., activity of different catalysts for vapour-phase esterification, I, 208. See also Abichandani, C. T., Datar, D. S., Kane, J. G., Krishnan, R., and Kulkarni, B. S.
- Jatlov, V. S., and Pinaevskaja, E. N., solubility of magnesium, zinc, and lead silicofluorides, I, 264. and Poljakova, E. M., equilibria in the systems KF-H₂O and KHF₂-H₂O, I, 80.
- Jatsenko-Chmelevski, A., and Konuchevska, H., influence of "physiological drying" of beech wood on the state of its plastic substances, III, 342.
- Jaulmes, C. See Sohler, R.
- Jauncey, G. E. M., theory of the diffuse scattering of X-rays by crystals in the region of the *K* critical absorption wave-length, I, 599. and McNatt, E. M., thermal vibrations and atomic structure of zinc crystals at 100° and 298° K., I, 243. Electron asymmetry in the atoms of zinc crystals, I, 306. See also Baltzer, O. J.
- Jauson, H., importance of the photocatalysts in diseases due to light, III, 318.
- Jausseran, C., absorption spectrum of the developed photographic image, I, 89. Spectral distribution of the light diffused by the photographic image in the ultraviolet, I, 447.
- Javillier, M., and Emerique-Blum, L., partial synthesis of vitamin-B₁ by protozoa, III, 1098.
- Javorski, A. N. See Sergeev, A. P.
- Jay, P., Hadley, F. P., Bunting, R. W., and Koehne, M., relation of *Lactobacillus acidophilus* to dental caries in children during experimental feeding of candy, III, 329.
- Jayaraman, N., cause of the colour of the blue quartzes of the charnockites of South India and of the Champion gneiss and other related rocks of Mysore, I, 346. and Krishnaswami, K. R., chemical and mineralogical study of a new titanium mineral from Nellore District, I, 435. See also Nilakantam, P.
- Jayle, M. F., comparative study of the catalytic action of plant peroxidases and hæmoglobin, III, 516. See also Polonovski, M.

- Jazwinska, J., Duhem's equation and Raoult's law, I, 516.
- Jeaffreson, B. L. See Carmichael, R.
- Jean, M. L., regeneration of the air of confined spaces by means of soda, III, 94.
- Jeanes, A. See Adams, R.
- Jeanneney, G., Castanet, P., and Cator, G., hæmo-bactericidal power in pregnancy, III, 633. Chemical cataphyllactic transfusion and vaccination *in vitro*, III, 880.
- and Servantie, L., determination of potassium as a test for alteration in stored blood, III, 448. Effect of p_H and nature of sodium citrate employed on sodium: potassium ratio of citrated plasma, III, 550.
- Servantie, L., and Ringenbach, G., variations in the potassium: sodium ratio of the plasma of citrated blood stored in the refrigerator, III, 556.
- Wangermez, C., and Ringenbach, G., electric charge of blood and transfusion shock, III, 742.
- Jeannerat, J. See Cherbuliez, E., and Duschinsky, R.
- Jeans, (Sir) J. H., expanding universe and origin of the great nebulae, I, 236.
- Jeans, P. C., child nutrition, III, 160.
- and Stearns, G., effect of vitamin-D on linear growth in infancy. II. Effect of intakes above 1800 U.S.P. units daily, III, 169. Human requirement of vitamin-D, III, 291.
- Jedlicky, A., Lipschütz, A., and Vargas, L., jun., sexual specificity in the conjunctive tumour reaction towards the follicular hormone (octoate and 17-benzoate-3-n-butyrate of œstradiol), III, 846.
- Jedlowski, P., experimental reproduction of human leuco-encephalomyelitis, III, 114.
- Jeener, R., and Pourbaix, N., effect of intra-arterial acetylcholine on excitability of striated muscle, III, 968.
- Jeffcoat, T. N. A., œstrogenic hormone therapy, III, 1052.
- Jeffers, K. R. See Guthrie, M. J.
- Jeffers, W. A. See Dohan, F. C.
- Jefferson, M. E. See Hendricks, S. B.
- Jeffery, G. H., and Vogel, A. L., dissociation constants of organic acids. XX. Thermodynamic primary dissociation constants of alkylglutaric acids, I, 262. See also Cowan, D. M.
- Jeffrey, E. C., and Haertl, E. J., nature of so-called sex chromosomes in *Ascaris*, III, 269.
- Jeffrey, G. A. See Cox, E. G.
- Jeghers, H. See Wald, G.
- Jelley, E. E., experimental rulings, I, 221.
- Jellinek, E. M., insulin treatment of schizophrenia. I. Methods, III, 902.
- and Looney, J. M., statistics of biochemical variables on healthy men in the age range of 20 to 45 years, III, 695. See also Cameron, D. E., Looney, J. M., and Randall, L. O.
- Jellinek, S., short-wave therapy, III, 514.
- Jeimerin, E. E. See Hollander, F.
- Jen, P. C., and Lewis, H. B., availability of dibenzoyllevstine for growth of the young white rat, III, 283. Metabolism of sulphur. XXVI. Metabolism of cystinebetaine, III, 297.
- Jenckel, E., dependence on temperature of viscosity of melts, I, 462.
- [with Foetsch, H.], rate of crystallisation and crystallite number of lead with small additions of calcium, strontium, barium, and silver, I, 70.
- Jendrassik, L., and Szabó, M. R., photometric evaluation of a brown diazo-reaction of blood-serum, III, 234.
- Jeney, A. von, Ari, L., and Baranyai, P., action of quercitrin on dinitrophenol hyperthermia, III, 866.
- and Czimmer, A. G., action of rhamnetin and hesperitin on frog's heart, III, 1002.
- and Sokoray, L., action of flavin substances on the frog's heart, III, 183.
- and Valgy-Nagy, T., antagonism of quercitrin and 2:4-dinitrophenol on the respiratory metabolism of rats, III, 866.
- Jenke, M., determination of serum-cholic acids, III, 553.
- and Graff, U., cholic acid content of portal blood, III, 593.
- Jenkin, B. M., and Mortimer, C. H., [apparatus for] sampling lake deposits, I, 104.
- Jenkins, C. E., and Thomson, M. L., non-hemoglobin cellular iron in anæmia, III, 228.
- Jenkins, F. A., and Segré, E., quadratic Zeeman effect, I, 166. Zeeman effect of the forbidden lines of potassium, I, 289.
- Jenkins, G. I., and Norris, A., thickness of built-up films, I, 609.
- See also Hammick, D. L.
- Jenkins, G. L. See Brewster, P. M.
- Jenkins, H. G., and Bowtell, J. N., ratio of primary to secondary light emitted in fluorescent discharge tubes containing neon, I, 122.
- McKeag, A. H., and Rooksby, H. P., position occupied by the activator in impurity-activated phosphors, I, 451.
- Jenkins, H. O., dissociation constants of isomeric halogeno- and nitro-benzoic acids, I, 321. Dissociation constants of isomeric halogeno- and nitro-anilines and -phenols, I, 472.
- See also Dippy, J. F. J.
- Jenkins, R. L., and Lesser, M., motor stability in children with cerebral paralysis, III, 1038.
- Jenkins, R. O. See Benjamin, M.
- Jennings, D. A. See Florey, H. W.
- Jennings, D. S. See Nielsen, J. P.
- Jennings, M. A. See Florey, H. W., and Wright, R. D.
- Jenny, H., Overstreet, R., and Ayers, A. D., contact depletion of barley roots as revealed by radioactive indicators, III, 1108.
- Jensch, H., synthesis of mescaline, II, 15.
- Jensen, Einar, [spot] reactions in qualitative analysis, I, 383. Geological thermometry, I, 541.
- and Nilssen, B., thallous carbonate as an acidimetric standard, I, 576.
- Jensen, Elisabeth. See Kinsman, G.
- Jensen, Elsa, bactericidal properties of solutions used in preparation of aseptic injections, III, 306.
- Jensen, H. (Hamburg), pressure-density diagram of elements at higher pressures and at absolute zero, I, 134.
- Jensen, Hans, chemical assay of insulin, III, 909.
- Simpson, M. E., Tolksdorf, S., and Evans, H. M., chemical fractionation of gonadotropic factors present in sheep pituitary, III, 905.
- and Tolksdorf, S., relation of anterior pituitary to sex and metabolism, III, 1045.
- Jensen, H. B. See Astrup, T.
- Jensen, H. F., insulin, its chemistry and physiology, III, 49.
- Jensen, K. A. (Copenhagen), spatial configuration of platinumous and palladous complexes, I, 303. Fluorescent indicators, II, I, 428. Acidic strengths of the stereoisomeric diaquodiamminoplatinous ions, I, 472.
- Jensen, K. A. (Zürich), constitution of vitamin-E, III, 706.
- See also Karrer, P.
- Jensen, O. G. See Supplee, G. C.
- Jensen, P., magnetic susceptibility of potassium bromide crystals with colour centres, I, 131.
- Jenss, R. M. See Dunham, E. C.
- Jentgens, H., gold therapy of pulmonary tuberculosis, III, 779.
- Jents, E., calcium therapy in oto-rhinolaryngology, III, 616.
- Jentschke, W., and Frankl, F., heavy particles produced on the disintegration of uranium and thorium which have been bombarded with neutrons, I, 235.
- See also Stetter, G.
- Jephcott, C. M., and Bulmer, F. M. R., urinary sulphate test in the supervision of workers exposed to benzene, III, 621.
- See also Riddell, A. R.
- Jéques, E., and Apsey, G. R. M., anti-pernicious anæmia principle, III, 7.
- Jeremenko, N. P., physical-chemical properties of cholesterol exposed to ultraviolet radiation, II, 212.
- Jérémime, E., new occurrence of sapphire, I, 587.
- Jermolenko, N., and Levina, S., adsorption of organic acids from single and mixed solvents, I, 608.
- Jermoljeva, Z. V., and Biujanovskaja, I., lysozyme, its properties and its applications, III, 721.
- Jermstad, R. J. See Davis, H. A.
- Jerochin, J. S. See Volarovitsch, M. P.
- Jerofeev. See under Erofeev.
- Jersild, T., hæmoptysis and lung infiltration caused by avitaminosis, III, 498.
- and Elmby, A., measurement of capillary resistance, III, 20.
- Jerusalinski, B. M., and Lisenko, G. A., effect of blood transfusion on rate of sedimentation of erythrocytes, in scarlet fever, III, 449.
- Jervis, G. A., metabolic investigations in a case of phenylpyruvic oligophrenia, III, 80. Heredity and mental defect: genetics of phenylpyruvic oligophrenia, III, 902.
- Jerzmanowska, Z., and Gamota, I., condensation of esters of unsaturated acids with carbamide. IV, II, 11.
- and Kłosówna, S., thermal decomposition of glucosides, II, 10.
- Jesse, W. P., and Gill, P. S., latitude effect for very large cosmic-ray bursts, I, 236.
- See also Schein, M.
- Jessen, H., polyncuritis and vitamin-B₁, III, 401.
- Jesser, H., and Thomae, E., iodine-air investigations, I, 391.
- Jesserer, H. See Brücke, F. T. von.
- Jessup, R. S., heats of combustion of diamond and of graphite, I, 27.
- See also Rossini, F. D.
- Jette, E. R. See Anderson, A. G. H.

- Jetter, W. W., correlation between blood-ascorbic acid and the dichlorophenol-indophenol intradermal test, III, 168. Diagnosis of acute alcoholic intoxication by a correlation of clinical and chemical findings, III, 313. Experimental feeding of alcohol to non-alcoholic individuals, III, 313.
- Jeune, M. See Chaliel, and Froment, R.
- Jevdokimov, V. See Schulvas-Sorokina, R.
- Jevons, W. See Barrow, W.
- Jewett, S. P., Rosow, H. M., and Pumpian-Mindlin, E., high-dosage atropine therapy in chronic encephalitic parkinsonism, III, 180.
- Jezek, M. See Dolejšek, V.
- Jezer, A. See Schwartz, S. P.
- Jezierski, T. W., influence of the structure of bromo-derivatives of alkyl- and alkoxy-benzenes on the synthesis of pinacols by the Grignard method, II, 420.
- Jezler, A., Donaggio test [for physical efficiency], III, 193. Vitamin-C metabolism, III, 288.
- and Haffter, C., vitamin-C requirements during severe body exercise, III, 603.
- Jezowska-Trzebiatowska, B., and Jodko, C., complex chlorides of quadrivalent rhodium, I, 275.
- Jha, J. D. See Singh, B. N.
- Jilek, A., and Kohut, B., determination of cadmium, and its separation from bismuth, by means of potassium iodide and hydrazine hydrate, I, 535.
- Jindra, A. See Bureš, E.
- Jirgensons, B., optical activity of vitamin-C, III, 1073.
- Joachim, G., treatment of circulatory failure in acute infectious diseases, III, 411.
- Joannovich, D., treatment of tinnitus with hypertonic magnesium sulphate, III, 904.
- Jochim, K. See Katz, L. N.
- Jodko, C. See Jezowska-Trzebiatowska, B.
- Joel, C. See Pollak, O. J.
- Joel, K., imbedding of seminal fluid, III, 913.
- See also Wenner, R.
- Joel, W. See Mainzer, F.
- Jotten, K. W., pulmonary injury by manganese dust, III, 621.
- Replöh, H., and Hegemann, G., manganese pneumonia and its relation to basic slag pneumonia, III, 1092.
- Jofa, S., overvoltage on a mercury cathode in concentrated solutions of acids. I. Hydrochloric and hydrobromic acids, I, 614.
- and Frumkin, A., influence of stirring on current-voltage curves obtained with a mercury cathode, I, 148.
- Kabanov, B., Kutschinski, E., and Chistiakov, F., overvoltage on mercury in the presence of surface-active electrolytes, I, 614.
- See also Bruns, B., and Kabanov, B.
- Joffe, A. F., semi-conductors in intense fields and their rectifying action, I, 404.
- Joffe, J. S., sulphonation of 1:2-benzanthraquinone and mesobenzanthrone, II, 219. Diaryls and their derivatives. XXII. Diphenanthryl dioxide, II, 544.
- and Bravina, S. S., preparation of nitrophenyl α -naphthyl ketones, II, 551.
- Efros, L. S., and Schtscheglova, C. N., bromination of 2-hydroxyanthracene, II, 543.
- Joffe, J. S., and Kaschnitzkaja, E. N., sulphonation. VI. Sulphonation of 1:2-benzanthraquinone, II, 555.
- and Kritschewtzov, B. K., diaryls and their derivatives. XXI. Oxidation of α -naphthol, II, 544.
- and Melteva, N. N., sulphonation. IV. Sulphonation of benzanthrone, II, 551.
- and Naumova, G. Z., sulphonation. V. Sulphonation of phenyl α -naphthyl ketone, II, 551.
- and Soloveitschik, V. J., derivatives of diphenyl- p -phenylenediamine, II, 309. Structure of aniline-black. III. Structure and mechanism of formation of Willstätter's imines, II, 329. Reaction of p -phenylenediamine and its derivatives with diazonium salts. III. Transformation of diazonium salts, II, 329.
- Johansen, G. See Linderström-Lang, K.
- Johanson, A. J. See Adams, R.
- Johlin, J. M., acceleration of formal detoxification of staphylococcus toxin by adsorption, III, 1102.
- John, F., late after-effects of X-radiation, III, 319. Autonomic control of functions of skin, III, 1039.
- John, H. J., haemochromatosis without pigmentation of skin, III, 773. Repeated glucose tolerance tests in children, III, 855.
- John, T. See Bowden, S. T.
- John, W., vitamin-E, III, 770.
- Dietzel, E., and Emte, W., antisterility factors (vitamin-E). VI. Oxidation products of tocopherols and of simple analogous models, II, 175.
- Gunther, Ph., and Schmeil, M., syntheses of chroman derivatives with the ring system of α -tocopherol. I, II, 82.
- Johns, H. E., Wilhelm, J. O., and Smith, H. G., flow and viscosity of liquid helium, I, 515.
- Johnson, A. S., an unexpected electrocardiogram of the foetus, III, 122. Present status of blood sedimentation rate, III, 892.
- Johnson, A. W. See Heilbron, I. M.
- Johnson, B. C. See Wiese, A. C.
- Johnson, B. K., achromatic lenses employing lithium fluoride and fused quartz, I, 280.
- Johnson, C. A. See Boomer, E. H.
- Johnson, C. H. See Ettle, G. W.
- Johnson, D. See Earl, J. C.
- Johnson, D. L., and Shrewsbury, C. L., mercury control for capillary burettes, I, 222.
- Johnson, E. M., Knight, E. O., and Walker, T. K., mechanism of the formation of organic acids by mould fungi. III. Effect of iodoacetate and of fluoride on the formation of acids, III, 522.
- Johnson, E. P., and Bell, W. B., blood-pH of leucotic fowls, III, 959.
- Johnson, F. E., injury of the child by Roentgen ray during pregnancy, III, 318.
- Johnson, F. H., hexose oxidation by luminous bacteria. III. Escape of respiration and luminescence from inhibition by α -methyl-glucoside, with a note on urethanes, III, 201.
- and Anderson, R. S., hexose oxidation by luminous bacteria. II. Inhibition of glucose oxidation by α -methyl-glucoside, III, 201.
- Johnson, F. H., and Chambers, E. L., oxygen consumption and methylene-blue reduction in relation to barbital inhibition of bacterial luminescence, III, 792.
- and Schouwenburg, K. L. van, decomposition of hydrogen peroxide by catalase, I, 617.
- Johnson, H. J. See Short, J. J.
- Johnson, H. L., activation of the peritoneal mechanism of defence, III, 531.
- Johnson, H. W., carbohydrate-nitrogen relationship and carotene in green lucerne and in that yellowed by leaf-hopper, III, 436.
- Johnson, I. J., and Miller, E. S., immediate effect of cross pollination on carotenoid pigments in endosperm of maize, III, 436.
- See also Miller, E. S.
- Johnson, James, plant virus inhibitors produced by micro-organisms, III, 335.
- Johnson, Julian, and Riegel, C., effect of experimental hyperthyroidism and hypothyroidism on concentration of cholesterol in hepatic bile, III, 692.
- Johnson, J. A., and Agnew, W. G., relative air dustiness during cycle of operations at Mount Weather testing adit, III, 1093.
- Johnson, J. R., and Di Palma, J. R., intramyocardial pressure and its relation to aortic blood pressure, III, 656.
- See also Ray, G. B.
- Johnson, J. W., jun., primary hyperparathyroidism with renal calcification and secondary hyperplasia of the parathyroids, III, 680.
- Johnson, L. D., catalysis, I, 478. Apparatus for determining percentage composition, I, 494.
- Johnson, L. V. See Eckardt, R. E.
- Johnson, M. H. See Halpern, O.
- Johnson, M. J. See Berger, Julius, Christensen, W. B., and Phelps, A. S.
- Johnson, M. L., effect of vitamin-A deficiency on retina of rat, III, 752.
- Johnson, O. See Reyerson, L. H.
- Johnson, P. E. See Swann, H. G.
- Johnson, R. E. See Edwards, H. T., and Snyder, C. D.
- Johnson, R. P., simple electron microscopes, I, 42. Decay of willemite and zinc sulphide phosphors, I, 355.
- and Davis, W. L., luminescence during intermittent optical excitation, I, 550.
- Johnson, S. H. See Wigton, R. S.
- Johnson, S. R., level of inorganic phosphorus in blood of dairy cattle, III, 556.
- Johnson, T. B., synthesis of α -aminopelargonic acid, II, 495. Synthesis of sulphonyl chlorides by chlorination of sulphur compounds, II, 538.
- and Ambelang, J. C., pyrimidines. CLIX. Synthesis of 6- and 5-benzyluracils, II, 344. Attempted hydrogenation of 3-methylxanthine, II, 453. Desmotropism of xanthine derivatives, II, 522.
- and Douglass, I. B., action of chlorine on thiocyanates, II, 498.
- and Endicott, M. M., vitamin research, II, 390.
- and Sprague, J. M., nitrogenous products formed by chlorination of isothiobarbitamides, II, 107.
- See also Ambelang, J. C.

- Johnson, T. H., effect of earth's magnetic field on cosmic rays, I, 116. Geomagnetic effects and their bearing on fundamental problems of cosmic-ray investigation, I, 117. Cosmic-ray intensity and geomagnetic effect, I, 236. Investigation of cosmic rays, I, 399. Angular dispersion of cosmic radiation in the upper atmosphere resulting from reflexions of low-energy particles in the earth's magnetic field, I, 506.
- and Barry, J. G., east-west asymmetry of cosmic radiation at very high elevations near the equator, I, 236. East-west symmetry of cosmic radiation at very high elevations near the equator and evidence that protons constitute the primary particles of the hard component, I, 506.
- and Pomerantz, M. A., difference in absorption of cosmic rays in air and water and instability of the barytron, I, 175.
- Johnson, V., and Freeman, W., adaptive value of absorption of fats into lymphatics, III, 270.
- Johnson, V. A. See James, H. M.
- Johnson, W. A., aconitase, III, 786.
- and Mehl, R. F., reaction kinetics in processes of nucleation and growth, I, 616.
- Johnson, W. C., low-resistance glass electrode, I, 433.
- and Lindsey, A. J., improved universal buffer, I, 482.
- Johnson, Warren C., Stubbs, M. F., Sidwell, A. E., and Pechukas, A., rate of formation and dissociation of calcium hydride, I, 205.
- Johnson, W. S. See Fieser, L. F.
- Johnston, C. R. K. See McCullagh, E. P.
- Johnston, E. F. See Hobden, F. W.
- Johnston, E. S., and Weintraub, R. L., determination of small amounts of chlorophyll, III, 953.
- Johnston, F. D., granulocytopenia from sulphanilamide compounds, III, 81. Agranulocytosis after M. & B. 693, III, 179.
- Johnston, H. L., density of pure deuterium oxide, I, 311.
- See also Hogge, E.
- Johnston, J. A., and Maroney, J. W., nitrogen and calcium balances as affected by growth and gonadotropic hormones administered for short periods to growing children, III, 973.
- Johnston, J. E., fine structure of X-ray absorption edges of aluminum and zinc, I, 167. Avogadro number, I, 548.
- Johnston, J. H. See Barrett, H. M.
- Johnston, M. See MacLachlan, W. W. G.
- Johnston, M. W., Sheldon, J. M., and Newburgh, L. H., utilisation of carbohydrate in human under-nutrition, III, 1077.
- See also Conn, J. W.
- Johnston, R. A. See Brown, O. W.
- Johnston, R. L., cardiac depression by barbituric acid derivatives; relative antidotal action of cardiac stimulants, III, 86.
- Johnston, S. M. See Miller, Max.
- Johnston, W. D., jun. See Milton, C.
- Joiner, R. R. See Schmelkes, F. C.
- Joiris, P. See Weekers, L.
- Jois, H. S., Kuppusami, A., and Manjunath, B. L., isomerisation of benzylidene derivatives. I, II, 287.
- Jokivartio, E., and Kalaja, T., plasmalipins in acute schizophrenia, III, 652.
- Jolibois, P., oxidation-reduction phenomena in electrolysis by sparking, I, 29.
- and Bossuet, R., spectrum analysis of solutions containing metals, I, 536.
- Joliot, F., experimental proof of the explosive rupture of uranium and thorium nuclei under the action of neutrons, I, 174. Observation by the Wilson method of cloud[*-chamber*] trajectories of the explosion products of uranium nuclei, I, 235. Explosive rupture of the U and Th nuclei under the action of neutrons, I, 235.
- and Zlotowski, J., formation of a stable isotope of helium of mass five during collisions between deuterons and α -particles, I, 52. Determination by the Wilson method of nature and energy of particles emitted during transmutation; application to the disintegration of ^{18}B by α -particles, I, 53.
- See also Dodé, M., and Halban, H. von, *jun.*
- Jolliffe, N. See Bianco, A.
- Jolly, P., culture of mammalian eggs, III, 956.
- Joly, M., existence of two forms of protein surface films, I, 317.
- See also Dervichian, D.
- Joly, R. See Cornubert, R.
- Joly, R. A. See Cook, E. S.
- Jomain, J. See Adrianopoulos, A., and Cunéo, B.
- Jombers, P. See Bock, H. E.
- Jonás, V., diabetes mellitus treatment, III, 910.
- Jones, A. T., treatment of hydrofluoric acid burns, III, 779.
- Jones, B. See Bennett, G. M.
- Jones, C. A. See Boerner, F., and Murphy, J. A.
- Jones, C. M., report on progress in gastroenterology, III, 591.
- Urmey, T. V., Benedict, E. B., Clifford, M. H., and White, B. V., gastroenterology, III, 62.
- See also White, B. V.
- Jones, D. B., and Gersdorff, C. E. F., digestibility of proteins *in vitro*. VII. Liberation of cystine on tryptic digestion of caseinogen; instability of cystine to alkali, III, 871.
- Jones, D. C. See Foster, J. S.
- Jones, D. F., nuclear control of cell activity, III, 2.
- Jones, D. G. See Cook, A. H.
- Jones, E. R. H., caoutchicol, II, 273.
- Jones, F. A., treatment of hæmatemesis, III, 841. Salt and water requirements in hæmatemesis, III, 1057.
- Jones, F. G., experiments in the guinea-pig comparing the immunising value of unmodified diphtheria toxoid and alum-precipitated diphtheria toxoid, III, 203.
- and Moss, J. M., combined diphtheria toxoid and tetanus toxoid, alum-precipitated; prolongation of accelerated immunity following stimulating dose of antigen, III, 428.
- Jones, F. L., sparking potential of deuterium, I, 439. Mechanism of the spark discharge in hydrogen, I, 439. Influence of the cathode on the sparking potential of heavy hydrogen, I, 544.
- and Henderson, P., influence of the cathode on sparking potential of hydrogen, I, 439.
- Jones, F. W., anterior superior alveolar nerve and vessels, III, 955.
- Jones, F. W., and Sykes, C., transformations in copper-palladium alloys, I, 464.
- Jones, Grinnell, and Christian, S. M., viscosity of *n*-butanol, I, 135.
- and Ferrell, E., drainage of viscosimeters and pipettes, I, 222.
- Jones, G. L., electrolytic assay, I, 578.
- Jones, G. W. See Coward, H. F.
- Jones, H. See Allen, J. F., and Fowler, R. H.
- Jones, H. B., Chaikoff, I. L., and Lawrence, J. H., radioactive phosphorus as an indicator of phospholipin metabolism. VI. Phospholipin metabolism of neoplastic tissues, III, 707.
- Jones, H. D., effect of insulin on partially hypophysectomised rats, III, 906.
- Jones, Herbert W., and Miller, C. P., neutropenia following sulphanilamide, III, 177.
- Jones, Howard W., and Weil, P. G., corpus luteum hormone in early pregnancy, III, 58.
- Jones, I. H., and Knudsen, V. O., audiometry in routine practice, III, 38.
- Jones, I. R. See Spielman, A.
- Jones, J. A. See Holmes, J. W.
- Jones, James H., metabolism of calcium and phosphorus, III, 283.
- Jones, J. K. N., constitution of cherry gum. I. Composition, II, 246.
- See also Beaven, G. H., Gill, R. E., Hawkins, E. G. E., and Hirst, E. L.
- Jones, J. L., non-reaction of ethylene oxide and methanol, II, 137.
- Jones, J. R. E., antagonism between salts of heavy and alkaline-earth metals in their toxic action on tadpole of toad, III, 1089.
- Jones, J. W. See King, G. M.
- Jones, K. K. See Dolkart, R. E.
- Jones, K. M. See Thoday, D.
- Jones, M. S., thyrotropic hormone in clinical states, III, 677.
- and Stadie, W. C., choline-esterase content of muscle and serum, III, 900.
- Jones, R., sp. gr. of the inclusions in ultracentrifugal cells of *Elodea* and *Triticum*, III, 213.
- Jones, R. (Reading). See Crowther, J. A.
- Jones, R. C. See Furry, W. H.
- Jones, R. G., and Kinney, C. R., organo-boron-nitrogen compounds. I. Reaction of boron chloride with aniline, II, 460.
- See also Gilman, H.
- Jones, R. M., human sternal marrow in hyperthyroid and myxædematous states, III, 1024.
- Jones, R. N., Todd, D., and Noller, C. R., saponins and sapogenins. XII. Product of direct oxidation of echinocystic acid with dichromic acid, II, 517.
- See also Fieser, L. F.
- Jones, S., external gills of *Acentrogobius viridipunctatus* (Day), III, 805.
- Jones, T., connexions of the phrenic ganglion, III, 30.
- Jones, T. B. See Meyer, A.
- Jones, T. T., and Davies, R. M., dielectric constants of liquids at radio frequencies: methyl alcohol, water, and methyl alcohol-water mixtures. III. Theoretical. IV. Experimental, I, 551.
- Jones, W. B., oolitic limestone deposits of Franklin Co., Alabama, I, 586.

- Jones, *W. Elwyn*, and *Ramage, G. R.*, symmetrical derivatives of chrysene. II. Elimination of methyl groups during dehydrogenation in attempt to prepare 1:10-dimethylchrysene, II, 15. See also *Barracrough, E.*, *Batty, J. W.*, and *Heilbron, I. M.*
- Jones, *William Edward*. See *Haworth, E.*
- Jones, *W. J.*, physiology of oil production in *Macadamia integrifolia*, III, 800.
- Jones, *W. Neilson*, obtaining permanent double-stained preparations of starch grains and their associated plastids, III, 804.
- Jones, (*Miss*) *W. O.* See *Hirst, E. L.*
- Jones, *W. R.*, lantern slides of photomicrographs in colour, III, 221.
- Jonesco, *G.* See *Malméjac, J.*
- Jongbloed, *J.*, and *Noyons, A. K. M.*, determination of true volume and sp. gr. of man by means of change in atmospheric pressure, III, 488.
- and *Wildschut, A. J. H.*, carbon dioxide and oxygen supply at high altitudes, III, 125.
- Jonker, *G. H.*, *Kruyt, H. R.*, and *Ornstein, L. S.*, formation and properties of silver bromide sol, I, 416.
- Jonker, *K. H. J.* See *Clay, J.*
- Jonnard, *R.*, interferometry studies on complement fixation, III, 1106.
- Jonnesco, *D.*, antirabics serum, III, 878.
- Jonsson, *E.*, "arthropathia mutilans," III, 67.
- Jonsson, *H.* See *Dimroth, K.*
- Jonxis, *J. H. P.*, arterial oxygen saturation and effect of oxygen therapy in pulmonary diseases, III, 1033.
- Joos, *G.*, and *Duhm, B.*, isotope effect in the line absorption spectrum of uranyl nitrate, I, 401.
- Joranson, *Y.*, and *Simons, J.*, *Endamoeba histolytica*; experimental infection of the stomachs of dogs and cats, III, 522.
- Jordan, *D. O.*, studies with the glass electrode in alkaline solutions, I, 29.
- Jordan, *H. E.*, comparative study of the discs of cross-striated muscle and simulaera in smooth muscle, with special reference to so-called transitional musculature, III, 445. Eosinophil production in the spleen of the newt, *Triturus viridescens*, III, 549. Blood cell changes during experimental nutritional deficiency, anaemia, and recovery in the newt, *Triturus viridescens*, with special reference to the erythrocytes, III, 646.
- Jordan, *H. J.*, *Sluiter, C. E.*, and *Postma, N.*, control of muscle tone through the pedal ganglia in *Helix pomatia*, L., III, 370.
- Jordan, *L.* See *Stevens, F. A.*
- Jordan, *Pascual*, theory of elementary particles, I, 176. Biological effects of ultra-violet light quanta, III, 318. Quantum-mechanical resonance attraction and the problem of immunising reactions, III, 1015.
- Jordanski, *D. N.* See *Feriantshitsch, F. A.*
- Jordi, *A.*, *Chvostek's* sign in adolescents, III, 256.
- Jordon, *H. E.*, aplastic anaemia; significance of the small lymphocyte, III, 350.
- Jordon, *J. W.* See *Osborne, E. D.*
- Jores, *A.*, and *Wolter, H.*, pyrethrum as anthelmintic, III, 862.
- Jorgensen, *D. L.*, experimental study of the sensitivity of a Geiger-Müller counter to a narrow beam of γ -rays, I, 160.
- Jorio, *M.* See *Charrier, G.*
- Jorissen, *W. P.*, and *Dekking, (Mlle.) A. C. B.*, induced oxidation, I, 270.
- Jorpes, *E.*, action of heparin, III, 10. and *Bergstrom, S.*, relationship between sulphur content and anticoagulant activity of heparin preparations, III, 231.
- Joseph, *L.* See *Gardner, J. H.*
- Joseph, *M.*, *Cohn, W. E.*, and *Greenberg, D. M.*, mineral metabolism with the aid of artificial, radioactive isotopes. II. Adsorption, distribution, and excretion of potassium, III, 772. See also *Anderson, Evelyn.*
- Joseph, *N. R.*, heterogeneous equilibrium of protein solutions. II. Interaction of salts with proteins; new type of calcium amalgam electrode, I, 23. Purification of crystalloids and colloids by electrodialysis, I, 44. Interaction of amino-acids and salts. III. Determination of the activities of calcium, barium, and strontium chlorides in amino-acid solutions by means of electrodes of the third kind, I, 565. and *Stadie, W. C.*, simultaneous determination of total base and chloride on the same sample of serum by electrodialysis, III, 14.
- Josephs, *H. W.*, relation of vitamin-A and carotene to serum-lipins, III, 992. Iron metabolism in infancy. I. Factors influencing iron retention on ordinary diets. II. Retention and utilisation of medicinal iron, III, 1080.
- Josephson, *B.*, volumetric determination of sulphur and sulphate ion, I, 276. Influence of composition of antigen extracts for serodiagnostics tests on syphilis (M.B.R. II and M.K.R. II), III, 206. Elimination of cholic acids in patients with liver disease, III, 692.
- Jungner, *G.*, and *Rydin, A.*, elimination of cholic acids. I. In healthy animals. II. In experimental jaundice, III, 389. and *Larsson, H.*, elimination of cholic acids in man, III, 692.
- Josephson, *E. M.*, and *Klewan, G.*, sulph-anilamide therapy in pneumonia, III, 1080.
- Joshel, *L. M.* See *Fieser, L. F.*
- Josien, (*Mlle.*) *M. L.*, formation of bromous acid in the action of bromine on silver nitrate, I, 211.
- Joslin, *E. P.* See *Marble, A.*
- Jost, *A.* See *Courrier, R.*
- Jost, *W.*, mechanism of detonating processes, I, 202. and *Muffling, L. von*, theory of explosion phenomena, I, 30. and *Teichmann, H.*, self-ignition of hydrocarbon-air mixtures under adiabatic compression, I, 375.
- Jostes, *F.*, and *Cronjé, J.*, phosphoric oxide as catalyst of the polymerisation of olefines. I. Existence of "benzenedimeta-phosphoric acids," II, 3.
- Jouan, *R.*, production of crystals for physical measurements, I, 223. See also *Châtelet, M.*
- Joubert, *G.*, ultra-violet spectrophotometric study of urinary elimination of benzoic and salicylic acids, III, 856.
- Joukovsky, *N. I.* See *Reding, R.*, and *Slosse, J.*
- Joules, *H.* See *Thomas, C. P.*
- Jourdan, *F.*, control of arterial pressure by sinus nerves in eviscerated dog, III, 657. and *Froment, R.*, electrocardiographic study of "escape" in vagal stimulation, III, 235. Electrocardiogram following auricular-ventricular block produced by crushing bundle of His, III, 895. Effect of sympathicolytic drugs on idioventricular rhythm, III, 964. See also *Froment, R.*, *Hermann, H.*, and *Sedallian, P.*
- Jovanovitch, *S. L.*, rapid electrolytic determination of antimony, I, 102.
- Joyce, (*Miss*) *L.* See *Crawford, B. L., jun.*
- Joyet, *G.* See *Mercier, P.*
- Joyet-Lavergne, *P.*, action of folliculin in transforming male into intersexual or female organisms, III, 269. Effect of testosterone on female organisms, III, 384. Cause of occasional masculinising effects of oestrone, III, 755. Effect of oestrone and oestradiol on vegetable cell, III, 932.
- Joyner, *A. L.*, white blood cells of the normal guinea-pig, III, 3. and *Sabin, F. R.*, altered cutaneous conditions in the skin of tuberculous guinea-pigs as demonstrated with a vital dye, III, 154. See also *Sabin, F. R.*
- Józefowicz, *E.*, ebulliometric study of the system formic acid-water, I, 263.
- Juda, *W.* See *Lemarchands, M.*
- Judd, *D. B.*, and *Kelly, K. L.*, designating colours, I, 626.
- Judin, *F. K.*, di- and poly-arylethane series. II. Synthesis of $\alpha\beta\gamma\delta$ -tetra-*p*-xenylbutane- $\alpha\delta$ -dione and of tetra-*p*-xenylfuran, II, 324. See also *Schilov, E. A.*
- Judina, *N. D.*, changes in the blood and haematopoietic organs after introduction of the carcinogen methyleholanthrene, III, 281. Reactivity of the haematopoietic system of thyroidectomised and gonadectomised rats of various ages, III, 350. Leukæmia and sarcoma of mice caused by 1:2:5:6-dibenzanthracene, III, 491.
- Juditskaja, *S.*, growth and differentiation of embryonic muscles in the extremities of a chicken, III, 807.
- Jürgens, *R.*, hæmorrhage and thrombosis, III, 230.
- Jugovics, *L.*, basalts of Pauliberg, Burgenland, I, 343.
- Juhász-Schäffer, *A.*, rôle of the vitamins in ophthalmology, III, 750.
- Juifs, *J.*, determinations of ionisation in the troposphere, I, 54.
- Juillet, *A.*, *Mercier, F.*, and *Vignoli, L.*, *Digitalis thapsi*, L., as a substitute for *D. purpurea*, L., III, 309.
- Jukes, *T. H.*, filtrate factor, III, 603. Pantothenic acid and the filtrate (chick antidermatitis) factor, III, 704. Pantothenic acid requirement of the chick, III, 853. and *Richardson, G. A.*, assays of riboflavin and the filtrate factor in certain milk products, III, 402. See also *Lepkovsky, S.*
- Julesz, *M.*, and *Winkler, E.*, curative experiments with a ketogenic diet, III, 162.
- Julianelle, *L. A.*, antigenicity of virus of trachoma, III, 879. Effect of trypsin on virus of trachoma, III, 946.

- Julianelle, L. A., and Pons, C. A., immunological and serological reactions of *Listerella monocystogenes*, III, 1012. Identification of *Listerella monocystogenes*, III, 1012.
See also Pons, C. A.
- Juliard, A., and Herbo, C., heterogeneous catalysis. II. Promotion in the hydrogenation of benzene, I, 208.
- Julius, H. W. See Wolff, L. K.
- Jullien, A., Latarjet, R., and Popier, A., permeability of isolated frog bladder to eosin, III, 275.
and Vincent, D., choline esters and choline-esterase in crustaceans, III, 394.
- Vincent, D., Bouchet, M., and Vuillet, M., effect of cardiac extracts on the heart of *Helix pomatia*, III, 309. Effects of drugs on heart of *Helix pomatia*, III, 309.
See also Latarjet, R., and Vincent, D.
- Jullien, P., derivatives of phenylacetone-nitrile, I, 422.
- Jung, A. See Leriche, R.
- Jung, F., arsine and blood, III, 819. Disappearance of methaemoglobin in presence of alcohol, III, 891.
See also Havemann, R., Moller, E. F., and Werder, F. von.
- Jung, F. T. See Isaacs, B. L.
- Jung, H., montmorillonite from the Mehmel summit (Thuringia), I, 109.
- Jung, J. See Bricard, J.
- Jung, R., oscillographic registration of ocular movements and nystagmus, III, 668. Autonomic responses and depressant effect of sensory stimuli in minor epileptic attacks, III, 831.
See also Weisschedel, E.
- Junge, C., activity of dust as condensation nuclei, I, 391.
- Junghans, E., allergic factors in causation of eclampsia, III, 913.
- Jungner, G. See Josephson, B.
- Jungnitz, H., dependence of modulus of elasticity, elastic limit, breaking strain, and total extension of palladium on the content of hydrogen at different temperatures, I, 554.
See also Kruger, F.
- Junkes, J. See Gatterer, A.
- Junousov, S. See Konovalova, R. A.
- Junowicz-Kocholaty, R., and Hogness, T. R., spectroscopic determination of cytochrome *c* and its distribution in mammalian tissues, III, 938.
- Jupe, M. H. See Cohen, H.
- Jupnik, H., bent-crystal transmission spectrograph for focussing hard radiation, I, 159.
- Juracec, A., transitory accumulation of carbohydrates in leaves of *Vicia faba* in direct sunlight and in shade, III, 730.
- Jurany, H., sensitive micro-test for thallium, I, 386. Filter apparatus for filtration and washing of precipitates on a microscope slide, I, 539. Micro-detection of salicylic acid as silver salicylate, II, 294.
- Juraschewski, N. K., alkaloids of *Arthropium leptocladum*, M. Pop., II, 456. Alkaloids of *Ungernia tadshicorum*, Vved., III, 220.
- Juraszyska, H., and Szulc, M., band spectrum of ionised magnesium deuteride, I, 57.
- Juravleva, M. See Buinov, N.
- Juriev, J. K., catalytic transformations of heterocyclic compounds. X. Synthesis of *N*-substituted pyrroles, *N*- and α -substituted pyrrolidines, and α -methylthiophen, II, 279.
[with Kantscheeva, O. A.], catalytic transformations of heterocyclic compounds. XI. Mechanism of simultaneous catalytic dehydrogenation of furan and furanidin (tetrahydrofuran) with *sec.* and *tert.* amines, II, 338.
and Medovschschikov, N. G., catalytic transformations of heterocyclic compounds. XIII. Synthesis of pyrrolidine and thiophan by catalytic dehydration of butane- α -diol in presence of ammonia or hydrogen sulphide, II, 445.
- Pervova, E. J., and Sazonova, V. A., catalytic transformations of heterocyclic compounds. XII. Conversion of tetrahydropyran into piperidine, *N*-ethylpiperidine, and tetrahydrothiopyran, II, 445.
- Jurisch, I. See Staudinger, H.
- Jurišić, P. J. See Lazarević, M.
- Jurist, A. E., and Christiansen, W. G., oxalate formation in ascorbic acid solutions, II, 533.
- Jurka, E., polarographic studies with the dropping mercury cathode. LXXXIX. Simultaneous occurrence of the two known protein effects produced in buffered cobalt solutions, I, 475.
- Jurkina, V. I. See Verner, A. R.
- Jurukoff, B., isolation of the Bulgarian lactic acid bacillus, III, 329.
- Jusa, E., and Steckler, R., thioindigo dyes with ability to couple, obtained from β -naphtholthioglycolic acids, II, 124.
- Jusa, V. A. See Roiter, V. A.
- Jusatz, H. J., influence of vitamin-C (*l*-ascorbic acid) on immunity processes, III, 851.
- Juschantzev, V. I., photo-electric apparatus for determining intensity of coloration of solids and powders, I, 43.
- Jusephovitsch. See under Juzefovitsch.
- Just, F. See Fink, Hermann.
- Justi, E., specific heat, enthalpy, entropy, and dissociation of technical gases, I, 310.
and Kohler, M., thermodynamics of gas mixtures, I, 363.
See also Foroud, A.
- Justin-Besançon, J. See Chiray, M., and Villaret, M.
- Justoni, R., reaction of methyl α -chloroethyl ketone with potassium cyanide, II, 406.
See also Quilico, A.
- Juul, A., estimation of morphine by tail reaction in mice, III, 866.
- Juza, R., and Hahn, H., crystal structure of germanium nitride, I, 129. Metallic amides and metallic nitrides. VII. Copper nitride, I, 379.
- Juzefovitsch, A. A. See Rusinov, L. I.

K.

- Ka, H. See Kawase, K.
- Kaatz, A. See Hirsch, W.
- Kaavkov, S. V., correlations of different receptors in colour vision, III, 675.
- Kabadi, M. B. See Mehta, S. M.
- Kabanov, B., measurement of current density, I, 280.
- Filippov, S., Vanjukova, L., Jofa, S., and Prokofeeva, A., overvoltage of hydrogen on lead, I, 525.
See also Jofa, S.
- Kabat, E. A., mol. wt. of antibodies, III, 531. Polysaccharide in tumours due to a virus of leucosis and sarcoma in fowls, III, 1064.
See also Tiselius, A.
- Kabat, H., and Visscher, M. B., elastic properties of beating tortoise ventricle with particular reference to hysteresis, III, 654. Influence of *k*-strophanthoside on elasticity of the tortoise ventricle, III, 862.
See also Dennis, C.
- Kabelitz, G., excretion of urinary dyes in diabetes insipidus, III, 907.
- Kadanoff, D., relation of size and curvature of base of skull to profile angle, III, 805. Relation of size of sella turcica to skull size, III, 807.
- Kadish, M. A. See Menkin, V.
- Kadlec, K. See Santavy, F.
- Kadow, K. J. See Anderson, H. W.
- Kägi, H., and Miescher, K., steroids. XX. New colour reaction in the steroid series and its chemistry, II, 317.
See also Miescher, K.
- Kagan, G. See Bowman, K. M.
- Kagan, M., [hydrogenation of iron nitrides], I, 618.
- Kagan, M. J. See Morozov, N. M.
- Kahan, T., transmutations of light nuclei and their theoretical interpretation, I, 232.
- Kahane, E., and Lévy, Jeanne, water-soluble choline constituents of blood and organs, III, 67. Water-soluble choline of invertebrates; the limpet, III, 155. Biochemistry of choline and its derivatives. VIII. Experimental methods; water-soluble choline of (IX) blood, (X) the organs of mammals, and (XI) invertebrates (limpet), III, 499. Effect of morphine on contraction of leech muscle induced by choline derivatives, III, 612.
and Missbach, C., fate of dust in the organism. VIII. Approximate determination of traces of carbon in the tissues, III, 344.
and Rousseau, (Mlle.) G., products of the hydrolysis of esters of choline, II, 248.
- Kahler, F., coal seams of Karawanken [Carinthia], I, 48.
- Kahler, H. L. See Sheen, R. T.
- Kahlson, G., heart action of camphor, cardiazol, and coramine, III, 88.
and MacIntosh, F. C., acetylcholine synthesis in sympathetic ganglion, III, 901.
- Kahn, B. See Frohlich, H.
- Kahn, I. S., sensitisation of skin induced by turbinal pollen application resulting in facial acne, III, 780.
See also Huber, H. L.
- Kahn, R. L., are there paradoxical serologic reactions in syphilis? III, 1103.
- Kaho, H., behaviour of the proteins of healthy and diseased potatoes towards salts, III, 218. Influence of carbon dioxide on exosmosis from stalk cells, III, 532.
- Kahovec, L., Raman effect. XCI. Asymmetric phthalyl chloride. C. Esters of boric acid. CVI. Nitrogen compounds. XVI. Condensation products of aldehydes with amines (I), I, 121, 403, 510.
and Wagner, J., Raman effect. XC. *para*-Substituted acetophenone. XCVI. Alkyl iodides, I, 121, 180.
- Kajiser, K. G., mastic reaction in acute anterior poliomyelitis, III, 634.

- Kaiju, M., arginase activity in rabbits with impaired liver function, III, 272. Arginase activity of tumours, III. Gastric carcinoma in man, III, 598.
- Kailan, A., and Albert, O., velocity of catalytic hydrogenation, V, 1, 15.
- Kaischew, R. See Krus, A.
- Kaiser, E. W. See Smith, L. I.
- Kaiser, Heinrich, and Wallcraft, A., electric sparks and their use for the excitation of spectra, I, 167.
- Kaiser, J. laboratory aids. I. Mill for grinding small quantities of organs. II. Apparatus for heating and sterilising slides. III. Protecting-caps for culture flasks, III, 209.
- Kajdi, C. See Kajdi, L.
- Kajdi, L., Light, J., and Kajdi, C., test for determination of vitamin-C storage, III, 1072.
- Kakemi, K. See Sugawara, S.
- Kakiuchi, Y., increase of X-ray reflexion from quartz due to a strong electric field, I, 11.
- Kaku, T., Itiyoda, K., and Ri, H., chlorination of *d*-sesamin, II, 225.
- Kalaja, L., and Narvanen, R., heart disturbances in vitamin-B deficiencies, III, 164.
- Kalaja, T. See Jokivartio, E.
- Kalandyk, S., thermionic emission from platinum in hydrogen and oxygen, I, 51.
- Kalauch, K. See Manegold, E.
- Kalbfleisch, H. H., cerebral embolism from a "myxoma" of the left auricle, III, 19. Experimental allergy, III, 191.
- Kalckar, H., formation of a new phosphate ester in kidney extracts, III, 275, 709. Phosphorylation in kidney extracts, III, 424. Respiratory quotient of kidney extracts, III, 693.
- Kalina, M. H., and Spinks, J. W. T., dichlorine hexoxide, I, 155.
- Kalinin, P. V., hyalophane from the Slyudyanka mine, I, 499.
- Kalinin, S. K. See Kovochatski, I. P., and Nikolaev, V. I.
- Kalinke, M. See Bansi, H. W.
- Kaliński, T. J., and Fijałkowski, C., colorimetric measurements; combustion of solids and liquids, I, 490. See also Pianhauser, J.
- Kalippe, E. See Kohlschütter, H. W.
- Kalk, H., and Frobenius, treatment of pneumonia, III, 512.
- Kallós, P., Doerr's membrane hypothesis of allergic reactions, III, 417. Bacteriology and immuno-biology of tuberculosis, III, 528. and Kallós-Deffner, L., calcium therapy in experimental allergic states, III, 192.
- Kallós-Deffner, L. See Kallós, P.
- Kalmus, H., hormonal effects of colour changes in *Potamobius astacus*, III, 135. Effect of tissue extracts on activity of *Potamobius astacus*, III, 135. Position of the receptor organ causing the periodic emergence of *Drosophila*, III, 844.
- Kalnins, V., determination of vitamin-C content of the human brain by the tooth test method, III, 995.
- Kaltscheff, J. See Dobref, M.
- Kaltwasser, J., assimilation and respiration in aquatic plants as an expression of their drought-resistance, III, 340.
- Kam, K. See Koster, W.
- Kamakura, K. See Kubo, H.
- Kamati, H. See Sato, Masakazu.
- Kamazawa, M. See Akahira, T.
- Kamberg, J. A. M., changes of the myocardium in coronary insufficiency, III, 237.
- Kamecki, J., conductometric studies. I. Mercuric chloride and sodium thiosulphate in conductometric analysis. II. Salts of heavy metals (mercuric and mercurous nitrate) and sodium thiosulphate. III. Salts of heavy metals (silver and lead nitrate, copper sulphate) and sodium thiosulphate, I, 278, 338. Conductometric analysis of sodium selenite and mercurous nitrate, I, 534. and Wierzbicki, M., effect of alternating current on the element $Pb|H_2SO_4|Pt$, I, 325.
- Kamegai, S., polarography of iron, I, 374. Phylogenetic, ontogenetic, and sexual aspects of copper in the organism. I. Blood-copper. II. Iron content and iron : copper ratio of blood. III. Copper and iron in blood of chick embryo. IV. Copper and iron in plant tissues, III, 963, 1061.
- Kamen, K. See Čech, V., and Čuta, F.
- Kamen, M. D. See Ruben, S., and Wilson, R. R.
- Kamenskaja, M. See Andrianov, K. A.
- Kamenski-Schmidt, I. N., titration of coloured solutions of sulphonic acids, II, 44.
- Kameyama, N., and Fukumoto, T., photo-conductance of dye-sensitized silver bromide and mechanism of dye-sensitization, I, 573.
- Kamiński, B., electric forces at the interface of two dielectrics, I, 317.
- Kamiński, M., volcanic tufas of the Carpathian foothills, I, 542.
- Kamijima, G. See Ishida, Y.
- Kaminski, E., transformations of the metastable β -phase in copper-zinc alloys, I, 517.
- Kaminsky, J., and Blaisdell, B. E., determination of internal volume of steel capillaries for measurement with gases, I, 225, 390.
- Kamio, S. See Hirasawa, K.
- Kamlet, J., detection of acetone and acetoacetic acid in urine, III, 276. Determining hypoproteinemia, III, 816.
- Kamman, G. R., bromides, their use and abuse, III, 415.
- Kammer, A. G., Isenberg, N., and Berg, M. E., medical supervision of benzene plant workers, III, 317.
- Kampe, K. auf dem. See Reichert, B.
- Kampmann, W., treatment of arterial hypertension, III, 746.
- Kamthong, B., and Robertson, A., furanocompounds. III. Euparin. V. Synthesis of tetrahydroeuparin and the structure of euparin, II, 383.
- Kan, T. See Sato, Masakazu.
- Kanamaru, K., ageing of cellulose nitrate in various media, I, 369.
- Kobayashi, Tadashi, and Seki, M., lyophilic properties of cellulose and its derivatives. V. Dependence of surface charge of viscose on age, I, 320. and Takada, Tomio, electrokinetic potential. III. Mechanism of formation of dipole double layer and interpretation of Coehn's rule. IV. Electrokinetic potential of sulphur against alcohols, I, 143. ζ -Potential at the boundary surface between solid and water in relation to internal micellar and crystalline structure of the former. I. Variation of ζ -potential of cellulose hydrate during its direct conversion into ordinary cellulose, I, 418.
- Kanamaru, K., Takada, Tomio, and Taniguchi, T., action of carbon disulphide on amino-compounds. I. Spectrographic study of simple dithiocarbamates, II, 359.
- Kanao, S., β -nitroethylbenzene, II, 361. and Inagawa, S., isomylamides of unsaturated acids, II, 369. N-Substituted amino-*p*-quinones, II, 379.
- Kanasugi, S. See Kubo, H.
- Kanatsu, H., origin of the hypoglossal nerve and its descending ramus, III, 30.
- Kanda, Z., intravenous injection of saline laxatives, III, 613. Effect of acetylcholine, choline, and potassium chloride on excitability of frog's ventricle, III, 931. See also Forst, A. W.
- Kandel, E. V., and LeRoy, G. V., lack of haemoregulatory effect of ascorbic acid, on patients with polycythemia vera, III, 227. Blood-glutathione in blood diseases, III, 554. Limitations of biopsy of sternal marrow, III, 1024. See also Brunschwig, A.
- Kandel, J., catalytic hydrogenation of α - and β -ionone, II, 169.
- Kane, G., equation of state of frozen neon, argon, krypton, and xenon, I, 557.
- Kane, G. P., influence of nitrogen peroxide on the two-stage ignition of hydrocarbons, I, 477.
- Kane, J. G., and Jatkar, S. K. K., binary systems. I. Adsorption from binary mixtures of toluene and acetic acid by charcoal and silica gel. II. Heats of adsorption from mixtures of toluene and acetic acid by charcoal and silica gel. III. Adsorption and heats of adsorption from mixtures of methyl alcohol and water by activated charcoal and silica gel. IV. Adsorption from mixtures of toluene and acetic acid by de-ashed animal charcoal, I, 21, 72.
- Kane, L. W. See Logan, M. A.
- Kaneko, O. See Shibata, Y.
- Kaneko, Takeo. See Akabori, S.
- Kaneko, Tetsuko. See Tange, U.
- Kanevski, E. A., polarographic curves, I, 267.
- Kangro, W., and Wiekling, H. W., vapour pressures of molten alkali chlorides and their binary mixtures with sodium chloride, I, 67.
- Kanitkar, U. K. See Dastur, R. H.
- Kanne, E. M., and McCarter, J. R., device for viewing precipitin reactions, III, 734.
- Kanne, W. R., transmutation of aluminium by polonium α -particles, I, 4.
- Kanner, M. H. See Barschall, H. H., and Ladenburg, R.
- Kanter, A. E., Klawans, A. H., and Barnes, B. O., origin of substance in urine which produces elongation of the bitterling ovipositor, III, 152.
- Kantscheva, O. A. See Juriev, J. K.
- Kanzler, R. See Schaffner, G. C.
- Kao, I. S. See Sah, P. P. T.
- Kao, Y. S. See Chuang, C. K.
- Kapadia, M. R. See Prasad, M.
- Kapitza, P. L., Strelkov, P. G., and Lauerman, E. I., Zeeman effect and Paschen-Back effect in powerful magnetic fields, I, 227.
- Kaplan, E. P. See Meschtscheriakov, A. P.
- Kaplan, I., Cohn, D. J., Levinson, A., and Stern, B., enzymes in normal and pathological cerebrospinal fluid, III, 902. See also Cohn, D. J.

- Kaplan, J., second Townsend coefficient, I, 165. Dellinger phenomenon, I, 165. Excitation of nobular lines, I, 229. Atomic lines in the auroral spectrum, I, 229. Production of ions in the auroral glow, I, 292. NH bands in the night sky spectrum, I, 298. Forbidden transitions in nitrogen, I, 439. Nitric oxide in the earth's upper atmosphere, I, 548.
- Kaplan, J. F. See Marvel, C. S.
- Kaplanski, S., Borovskaja, V., and Budanova, A., tyrosine and tryptophan contents of brain-protein in vertebrates. I, III, 471.
- Kapnick, I. See McKhann, C. F.
- Kapp, H., and Vischer, A., significance of the diastase reaction, III, 233.
- Kappler, A. See Meisenheimer,
- Kappus, A. L., and Winkler, A., quantitative relations [between amboceptor and sheep erythrocytes] in complement fixation tests, III, 1107.
- Kapri, M. See Rascanu, V.
- Kapsenberg, G., apparatus for automatic filtration, washing, and extraction, I, 161.
- Kapterev, P., revitalisation of organisms from perpetually frozen grounds, III, 337.
- Kaptzov, N. A., transition from coronal discharge to other forms of electrical discharge in gases, I, 228.
- Kapur, A. N. See Bhatnagar, S. S.
- Kapur, P. L., transmutation function for deuterons, I, 447.
See also Bhatnagar, S. S.
- Kapustinskaja, N. See Schamovski, L. M.
- Kapustinski, A. F., and Korschunov, I. A., heat of formation of magnesium sulphide, I, 566. Heat of formation of manganese sulphide, I, 566.
and Makolkin, I. A., free energy and heat of formation of cuprous sulphide from e.m.f. measurements, I, 420. Electrochemical determination of free energies and heats of formation of lead and stannous sulphides, I, 421. Determination of standard free energies of formation of metallic sulphides by the method of e.m.f. of galvanic cells, I, 613.
- Schamovski, L. M., and Bajuschkina, K. S., thermochemistry of isotopes; absorption spectra and heat of formation of lithium hydride and deuteride, I, 57.
- Kar, B. K., and Banerjee, H. N., effect of ethylene on *Mangifera indica*, III, 1111.
- Kar, K. C., and Basu, D., neutron-proton scattering, I, 117.
- Karády, S., Browne, J. S. L., and Selye, H., alarm reaction and water excretion, III, 185.
- Karantassis, T., Vassiliadis, C., and Perakis, N., cobalticyanides of the rare earths; preparation and magnetic properties, I, 483.
- Karaoglanov, Z., sensitivity of chemical reactions. II. Reactions of anions, I, 212.
- Karapetoff, V., scale for predicting nuclear transformations, I, 546.
- Karasek, F., and Poupa, O., variations in sensitivity of arteries in the ovariectomised frog to adrenaline, III, 478.
- Kardo-Suissova, E. K., acid-activation of *A. niger*, III, 100. Biochemical production of calcium gluconate, III, 100. Acid-resistance of *A. niger*, III, 100.
See also Rubel, L. N.
- Karelitz, S., prophylaxis against measles with the globulin fraction of immune human adult serum, III, 1105.
- Kargin, V., Papkov, S., and Rogovin, Z., solubility of high-molecular compounds. V, I, 563.
and Tolstaja, M., exchange adsorption by colloidal titanium dioxide, I, 561.
- Kariakin, J. V., preparation of pure ferrous sulphide, I, 334.
See also Diev, N. P.
- Karischin, A. P. See Dashevski, M. M.
- Kariyone, T., and Sugahara, T., chaulmoogryl chaulmoograte, I, 422.
- Kark, R. See Lozner, E. L.
- Karlik, B., helium content of rock-salt and sylvine, I, 541.
See also Foyn, E.
- Karlson, S., lessening labour pains with nitrous oxide, III, 778.
- Karlsons, K. See Straumanis, M.
- Karnatz, F. A., and Whitmore, F. C., identification of methylisopropylcarbinol in Sharples [commercial] diethylcarbinol, II, 45.
- Karnofsky, D., and Cronkite, E. P., effect of thyroxine on eruption of teeth in newborn rats, III, 1048.
- Károlyi, J., effect of ascorbic acid on arsenamine poisoning, III, 616.
- Karp, F. L., Nieman, H. A., and Lerner, C., cryotherapy for acne and its scars, III, 1092.
- Karpatschey, S., and Stromberg, A., electric conductivity and viscosity of molten salts, I, 68. Solutions of metallic cadmium in molten chlorides, I, 518.
- Karpe, G., axial displacement of poles of lens in accommodation, III, 1040.
- Karpen, V., equations of state and thermodynamics, I, 515. Role of electrons in production of the o.m.f. at the metal-electrolyte junction, I, 567. Role of electrons in the functioning of cells; Daniell cell, I, 613.
- Karpenko, M. K. See Borshkovski, S. E.
- Karpov, V. G., and Savitschenko, G. S., colorimetric determination of platinum, I, 102.
- Karrer, P., hydrogenations in the pyridine series, II, 446. The blue alkali salts of α -phyllolquinone (vitamin-*K*₁) and similar compounds, II, 554. Vitamin-*E* and related compounds, III, 497. Importance of carotenoids for the eye, III, 751.
and Bergel, F., chemical structure and properties of tocopherol (vitamin-*E*). II. Synthetic analogues and homologues and stability of tocopherol and tocopherol esters, III, 1074.
and Demole, V., synthesis and biological titration of vitamin-*E*, III, 169.
and Escher, R., constitution of the compound obtained from trimethylquinol and crotyl bromide, II, 174.
Escher, R., and Rentschler, H., simple hydroxychromans and hydroxycoumarans, II, 556.
and Fritzsche, H., lower homologues of α -tocopherol; β -tocopherol; constitution-specificity of vitamin-*E* action, II, 174. Two 4-aminocoumarans, II, 335.
Fritzsche, H., and Escher, R., lower homologues of α -tocopherol; oxidation products of compounds resembling tocopherol, II, 335.
and Geiger, V., vitamin-*K* from lucerne, III, 853.
- Karrer, P., and Hoffmann, Otto, higher homologue of α -tocopherol, II, 335.
and Jaeger, W., potentiometric titration of carotenoids with gold chloride, II, 235.
and Jaffé, W., stepwise degradation of lycopene, II, 98.
and Jensen, K. A., constitution-specificity of vitamin-*E* action, III, 169.
and Keller, H., potentiometric determination of the tocopherols; behaviour of *dl*- α -tocopherol when irradiated, II, 174.
Koenig, H., Ringler, B. H., and Salomon, H., steric relationships of α -tocopherol and further investigation of the lower homologues of α -tocopherol, II, 557.
and Obst, H., degradation of $\alpha\beta$ -diphenyl-octatetraeno to ζ -phenylheptatrienal, II, 548.
and Ringier, B. H., preparation of *dl*- α -tocopherol from synthetic phytol, II, 335.
and Straus, W., properties of colloidal carotene solutions, I, 75.
See also Dam, H., Demole, V., and Euler, H. von.
- Karschulin, M., cathodic polarisation of iron in nitric acid, I, 29.
and Ehrensward, C., periodic potential oscillations of tin in CrO_3 -HCl solutions. I, I, 83.
- Karshev, V. I., and Sorokin, P. Z., kinetics of reactions taking place in presence of mixed catalysts, I, 208.
and Vassilieva, Z. A., kinetics of dehydrogenation of decalin in presence of mixed catalysts. IV, I, 88.
- Karsten, J. See MacGillavry, C. H.
- Karsten, J. G. A. See Gerding, H.
- Karve, D., and Dole, K. K., kinetics of reactions in heterogeneous systems. III. Hydrolysis of acid halides with water, I, 270.
- Kasahara, M., influence of ultra-sound waves on poliomyelitis virus and production of immunity, III, 946.
and Gammo, I., passage of tryptophan into cerebrospinal fluid, III, 750.
Nishizawa, Y., and Hirao, S., synergism of vitamin-*B*₁ and -C, III, 601.
and Ogata, S., vaccine immunity production with poeklymph treated with ultrasonic waves, III, 796.
- Kasahara, S., Hamano, R., and Yamada, R., choriomeningitis virus isolated in the course of experimental studies on encephalitis epidemics, III, 632.
See also Kawamura, R.
- Kasakova, V. A. See Iljinski, M. A.
- Kasatotschkin, V. I., electronic diffraction in the surface layers of metal alloys, I, 313.
See also Schischakov, N. A.
- Kasbekar, G. S., and Normand, A. R., reaction between nitric acid and tin in presence of catalysts. II, I, 572.
- Kaschnitzkaja, E. N. See Joffe, J. S.
- Kaschpur, A. M., tables for derivation of p_H using the quinhydrone electrode, I, 37.
- Kaschtanov, L. I., and Rishov, V. P., oxidation of sulphur dioxide with ozone in presence of various concentrations of oxygen, I, 92.
- Kashiwazaki, A., influences of rapid change of temperature on the living organism. I. Influence on protein metabolism. II. Influence on residual nitrogen of blood, III, 154.
- Kaski, T. K. See Palomaa, M. H.
- Kasper, J. A. See Cope, E. J.

- Kass, J. P., and Burr, G. O., claudinisation of linoleic acid, II, 297.
- Miller, E. S., and Burr, G. O., constitution of linoleyl alcohol prepared by sodium reduction of linoleic acid, II, 137.
- Kassatoshkin. See under Kasatotschkin.
- Kassel, L. S., calculation of thermodynamic functions from spectroscopic data, I, 15.
- Kast, W., anisotropic liquids, I, 183.
- Kasten, G. W. See Vogel, R.
- Kasten, W., morphological changes in spleen macrophage cultures after phagocytosis of coal and quartz dust, III, 1093. Phagocytosis of coal and stone-dusts *in vitro*, III, 1093.
- Kastler, A., Raman effect and multiple scattering of light, I, 119.
- Kastner, M. See Ourisson, J.
- Kastrup, H., and Anagnostidis, N., gastritis [due to drugs], III, 841.
- Kaswin, A., inhibitory action of quaternary ammonium salts on activity of cholinesterase of serum, III, 871. Paralysis of autonomic ganglia by hexamethylenetetramine methiodide, III, 969. Sensitisation of adrenaline response by hexamethylenetetramine methiodide, III, 1051.
- See also Cortegiani, E.
- Katagiri, H., and Mugibayasi, N., relationship between nitrogen compounds of various seeds of crops and diastatic power of their malts. I. Kaoliang. II. Beans, especially mung beans. III. Glutinous and non-glutinous rice. IV. Barley and naked barley, III, 107, 199, 730.
- and Murakami, S., specificity of action of lactic acid bacteria on phosphoglyceric acids, III, 943.
- Katayanagi, M. See Uyeo, S.
- Katchalski, E. See Frankel, M.
- Katchalsky, A. See Frankel, M.
- Kate, H. ten. See Ornstein, L. S.
- Kater, J., diabetogenic action of anterior pituitary extracts, III, 136.
- Katheder, P. See Scheibe, G.
- Katô, H., influence of fixation on the weight of the brain, III, 251. Changes in acidity of gastric juice and in mucosa after various gastric operations, III, 689.
- Kato, Katsuji, triaxial correlation of haematological indices: its significance in classification and treatment of anemias, III, 113. Haematological indices in normal and anemic patients, III, 811.
- Kato, Kiyotoki, digestion of carbohydrates in mulberry leaves by silkworms. V. Influence on activity of digestive enzymes of silkworms bred on mulberry leaves to which sucrose is added in various proportions. VII. Changes in respiration of silkworms bred on mulberry leaves to which sucrose is added in varying amounts. VIII. Changes in metabolism when bred on leaves and sucrose and fate of the digested sucrose. IX. Digestion of carbohydrates in leaves of different kinds of mulberry trees. X. Carbohydrate content of mulberry leaves. XI. Relation between sericultural harvest and carbohydrate content. XII. Determination of carbohydrate in leaves, III, 162, 708, 803.
- and Miwa, S., digestion of carbohydrates in mulberry leaves by silkworms. VI. Effect on activity of blood enzymes and blood-nitrogen composition when silkworms are bred on leaves to which sucrose has been added, III, 233.
- Kato, M., difference in pressor action between adrenaline and sympatol, III, 612.
- Kato, Sechi, and Ishii, R., molecular compound of ferric chloride extracted by ether from hydrochloric acid solution, I, 485.
- and Someno, F., molecular structure and chemical reaction. I. Molecular rearrangement of aromatic amines, II, 256.
- Kato, Seiichi, abrodil in blood and urine in intravenous pyelography, III, 275.
- Kato, T., density of elastic fibres in the skin, III, 2.
- Kato, Y. See Takahashi, Hiraku.
- Katoh. See under Kato.
- Katsch, G., and Krainick, H. G., physiology and pathology of intermediate fat metabolism. VII. Hyperlipemia and diabetes, III, 708.
- Katschalov, A. I. See Spitzin, V. I.
- Katsura, S., Yesizumi, Z., Nanba, K., and Kobayashi, R., genesis of hyperlipinemia in tubular nephritis, III, 693.
- Katsurada, F., and Okino, T., cancer of cats, III, 70.
- Katsurai, T., precipitation of hydroxides and related phenomena, I, 332.
- Katuno, M., synthesis of isopropyl ether. V. Dehydration of isopropyl alcohol with sulphuric acid under pressure. VI. Comparison of the catalytic powers of dilute sulphuric acid, benzenesulphonic acid, naphthalene-2-sulphonic acid, phosphoric acid, and oxalic acid, II, 355.
- Katz, B., transient relaxation of active muscle caused by quick loading, III, 565. "Anti-curare" action of subthreshold catelectrotonus, III, 568. Relation between force and speed in muscular contraction, III, 748. Nerve excitation by high-frequency alternating current, III, 828.
- and Schmitt, O. H., excitability changes in nerve fibre during passage of impulse in adjacent fibre, III, 748.
- Katz, D. L., and Saltman, W., surface tension of hydrocarbons, I, 129.
- Katz, G., micro-bioassay method on isolated tissues, III, 84. Intravenous infusion pump, III, 734.
- Paine, W. G., and Tiller, P. M., coronary perfusion, III, 358.
- Katz, J. R., and Fuller, C. S., changes in X-ray pattern of the polyfructosan irisin on drying, I, 359.
- and Seiberlich, J., physical chemistry of starch and bread-making. XXX. Disintegration of paste in two stages; in the first the X-ray spectrum changes, in the second the starch granules swell; puffed cereals, I, 76.
- See also Samec, M.
- Katz, K., excretion of prolan A before and after operations for cancer, III, 259. Changes in the ovarian epithelium after treatment with prolan and tar, III, 587.
- Katz, L. N., Friedman, M., Rodbard, S., and Weinstein, W., renal hypertension, III, 822.
- and Kolin, A., carotid blood flow in the dog determined with the electromagnetic flow-meter, III, 21.
- and Lindner, E., action of excess of sodium, calcium, and potassium on the coronary vessels, III, 237.
- Lindner, E., Weinstein, W., Abramson, D., and Joachim, K., effects of drugs on coronary circulation of the denervated heart, III, 19.
- Katz, L. N. See also Friedman, M., Lindner, E., and Robertson, S.
- Katz, N. N. See Grünberg, A. A.
- Katz, S. See Goodeve, C. F.
- Katzenellenbogen, L., nicotinic acid in endemic glossitis, III, 767.
- Katzenstein, F. C., and Soskin, S., hormonal influences on excitability of muscular protoplasm of the rat's uterus, III, 480.
- Katzin, E. M., and Levine, P., problem in blood grouping, III, 649.
- See also Levine, P.
- Katznelson, I. L., and Bernshtein, A. I., viscosity in the system $\text{AsBr}_3\text{-PhNO}_2$, I, 16.
- Katznelson, Z. S., development of striated muscle tissue [in amphibia], III, 463.
- Katzoff, S., and Roseman, R., solution of orthotitanic acid in hydrogen peroxide, I, 413.
- Kaufert, F. See Schmitz, H.
- Kauffman, W. R. See Titus, H. W.
- Kauffmann-Cosla, O., Gheorghiu, P., and Brull, R., biological action of zinc, III, 627.
- Kaufmann, W., vagal influence on reflexes of somatic musculature, III, 36. Central effects of sodium sulphide on reflex contraction of the tibialis anticus muscle, III, 191. Effects of chemical stimulation of the carotid body on the reflex contraction of the tibialis anticus muscle, III, 252.
- Kaufmann, A. R., current balance for measuring magnetic fields and susceptibilities, I, 44.
- Kaufmann, E., growth of roots under influence of different concentrations of growth substances, III, 214.
- Kauffmann, H., and Wassermann, A., mechanism of additions to double bonds. X. Kinetics of association of cyclopentadiene, I, 376.
- See also Benford, G. A.
- Kaufmann, L. See Endres, G.
- Kaufmann, O., serological differentiation of *Spirochaeta icterogenes* and *S. canicola*, III, 205.
- Kaufmann, W., orthostatic collapse, III, 193.
- Kauko, Y., and Carlberg, J., activity of hydrogen ions, I, 200.
- and Elo, H., first dissociation of carbonic acid, I, 419.
- and Knappsberg, L., reduction-oxidation potential of the antimony electrode, I, 525.
- Kaulla, K. N. von, heparin and sedimentation of blood, III, 550.
- Kaump, D. H., Heck, F. J., and Bannick, E. G., sedimentation rate and leukemoid reaction in metastatic tumours of bone, III, 449.
- Kaunitz, H., Neugebauer, R., and Schweiger, E., histamine content of organs in serous inflammation, III, 91.
- Neugebauer, R., Schweiger, E., Selzer, L., and Sigmar, M., influence of cortin on metabolism in disease, III, 139.
- and Selzer, L., effect of adrenal cortical extract on the oxygen consumption of isolated organs of fatigued rats, III, 43. Oxygen consumption during serous inflammation, III, 171. Effect of oxygen lack on oxygen consumption of isolated brain, muscle, and liver tissue, III, 171. Action of sodium lactate on the fat content of liver and muscle in fatigued rats, III, 173.

- Kausche, G. A., activation by γ -rays, III, 194. Colour test for tobacco-mosaic virus, III, 209. Plant virus, III, 335. Formation of hexagonal virus crystals from suspensions of the tobacco mosaic virus *in vitro*, III, 433. Preparation of crystals and the staining properties of aucuba mosaic virus, III, 633.
- Guggisberg, H., and Wissler, A., quantitative investigation of streaming double refraction of tobacco mosaic and potato-X viruses, III, 729.
- Pfankuch, E., and Ruska, H., making plant viruses visible with the super-microscope, III, 729.
- and Stubbe, H., activation of tobacco-mosaic virus by X-rays, III, 194. "Mutation" of tobacco mosaic virus induced by X-irradiation, III, 879. See also Pfankuch, E.
- Kautzky, A., reaction of small skin fields in Chaoul technique, III, 937.
- Kautsky, H., quenching of luminescence by oxygen, I, 125.
- and Merkel, H., phosphorescence, self-extinction, and sensitising action of organic substances, I, 301.
- Kautzsch, E. See Schneiderhohn, H.
- Kauzmann, W. See Gorin, E.
- Kavanagh, F. See Robbins, W. J.
- Kavetzkii, R. E., effect of exo- and endogenous factors on functional physiological state of connective tissue system. I, III, 121.
- Kawabata, M. See Arai, K.
- Kawabata, U., influence of denervation of the hilus of liver and kidney on local abscess formation, III, 36.
- Kawagoye, S., effect of natural and artificial diets on bacterial infection and production of immunity in young rabbits, III, 160. Effect of natural and artificial diets on body-weight, weight of internal organs, blood-cell counts, haemoglobin contents, and serum enzymes, III, 160. Effect of natural and artificial diets on body-weight, bacterial and p_H values of the gastrointestinal tract, III, 160.
- Kawaguchi, R., Kim, K. W., and Matsushita, K., constituents of leaves of *Vaccinium uliginosum*, L.; flavone glucoside from *F. uvae ursi* and *F. vaccinii vitis-idaea*, L., III, 951.
- Kawaguchi, S., micro-determination of bile acids, III, 344.
- Kawahara, J., cumulative action of digitals in rats and dogs, III, 85.
- Kawahata, H. See Asahina, Y.
- Kawahata, K., industrial lung cancer in gas generator workers in steel works, III, 70.
- Kawai, S., Nakamura, Takao, and Sugiyama, N., egonol. IX. General synthetic method for 2-phenylcoumarone and its derivatives and synthesis of egonol, II, 275, 383.
- Sugimoto, K., and Sugiyama, N., egonol. VIII. Noregonolodin acetate and intensely coloured compounds formed therefrom, II, 336.
- and Sugiyama, N., egonol. IV. Oxidation of acetylegonol with hydrogen peroxide. VI. Optical activity and active hydrogen atoms of egonol. VII. Synthesis of dihydroconiferyl alcohol and styraxinaldehyde, the two products of the degradation of egonol; reaction mechanism of the flavylium salt synthesis, II, 32, 80, 123, 222.
- Kawai, S., and Yamagami, K., egonol. V. Nature of hydroxyl group of egonol and oxidation of acetylegonol by selenium dioxide, II, 80.
- and Yoshimura, F., egonol. III. Degradation of acetylegonol by ozone, II, 32.
- Kawakami, T. See Ogata, A.
- Kawakami, K. See Kawase, K.
- Kawakatsu, R., influence of the seasons on pigment-excreting function of the liver, III, 149.
- Kawakita, K., chemisorption of carbon dioxide by reduced iron. III. Thermodynamic consideration of the chemisorption, I, 607.
- Kawakita, Y., cultivation *in vitro* of the virus of Japanese encephalitis, III, 728.
- Kawamoto, bactericidal action of human saliva, III, 336.
- Kawamura, A. See Konishi, K.
- Kawamura, H. See Kodama, T.
- Kawamura, R., Kasahara, S., Toyama, T., Nishinara, F., and Tsubaki, S., prevention of tsutsugamushi, III, 792.
- Kawamura, S., constitution of rhapontin, II, 417.
- Kawanami, M. See Noguchi, T.
- Kawasaki, G. See Funakubo, E.
- Kawasaki, O., tyrosinase. III. Effect of addition of various salts on potato-tyrosinase, III, 321.
- Kawasaki, T., α - and β -cholesteryl chlorides, II, 366. α - and β -cholesteryl bromides, II, 367. Catalytic hydrogenation of cholesteryl acetate in acetic acid containing hydrochloric acid, II, 420.
- and Yamamura, Z., action of acid clay on sterols. VI. Formation of phenylcholestene from cholesterol methyl ether, II, 363.
- Kawase, J. K., Ka, H., and Kawakami, K., alkaline earth. I, I, 437.
- Kawe, A., sensitivity of de Koninck's potassium reaction and magnitude of the K_2O factor in Kramer and Tisdall's micro-method for determination of potassium, I, 215.
- Kay, H. D., analysis and differentiation of composition of iron, phosphorus, and calcium compounds in respect of nutritional requirements. III. Phosphorus compounds in relation to nutrition, III, 701.
- Kaya, S., and Miyahara, S., magnetisation of pyrrhotite crystals, I, 407.
- and Nakayama, M., structure growth in iron-nickel-cobalt alloys and the perminvar problem, I, 365.
- Kayashima, S., effect of reduction and oxidation on the reversible action of liver-esterase. I, III, 196.
- Kaye, G. W. C., thermal and electrical resistance of bismuth single crystals; effects of temperature and magnetic fields, I, 360.
- Bell, G. E., and Binks, W., protection of radium workers from γ -radiation; protection afforded by building materials, III, 95.
- and Evans, E. J., sound absorption of snow, I, 188.
- Kayser, B., impossibility of a genetic relationship between macrocornea and megalocornea with hydrophthalmus, III, 835.
- Kayser, C., effect of temperature on heat production in the normal and hibernating dormouse, III, 78. Respiratory exchanges in *Muscardinus* and bats, III, 78.
- Kayser, C., seasonal evolution of chemical heat-regulation in awakened hibernating animals [relation to ductless glands], III, 1048. Cause of imperfect homeothermy in awakened hibernants, III, 1092.
- and Aron, M., seasonal cycle of endocrine activity in the hamster, III, 135. Changes in the adrenal medulla in thermal adaptation of hibernants, III, 581.
- See also Aron, M.
- Kayser, F., and Mathieu, C., determination of cholesterol by oxidation with chromic acid, II, 294.
- Kayser, H. W., vasomotor reflexes in carbon monoxide poisoning, III, 183. Relation between sensory and motor innervation of skeletal muscle, III, 827. Dorsal root potentials during muscle extension, III, 829. Effect of carbon monoxide on vasomotor reactions, III, 896. Carotid sinus reflex during carbon monoxide poisoning, III, 930.
- Kazakaschvili, G. G., and Topuria, P. A., syenite rocks of the Supsa river (West Georgia), I, 500.
- Kazano, T. See Tsuda, K.
- Kazanski, B. A., and Glushnev, N. F., hydrogenation of aromatic hydrocarbons by the action of calcium-ammonia. II, II, 53. Isomerisation phenomena accompanying reduction of diolefinic and aromatic hydrocarbons by means of calcium-ammonia, II, 295. Addition of hydrogen to aromatic hydrocarbons by the action of ammonia complexes of lithium, strontium, and barium. III., II, 305.
- and Liberman, A. L., kinetics of cyclisation of diisobutyl at platinised charcoal catalyst, I, 618.
- and Plate, A. F., catalytic cyclisation of paraffin hydrocarbons in presence of platinised charcoal, II, 410.
- and Sergienko, S. R., catalytic transformations of homologues of cyclopentane, II, 353.
- and Tatevosian, G. T., catalytic hydrogenation of compounds with several double linkages; hydrogenation of diphenylfulvene, II, 252.
- and Tschernova, N. G., catalytic transformations of 2-methyl-1:2:2-dicyclo- Δ^6 -heptene and of 2-methyl-1:2:2-dicycloheptene, II, 53.
- and Voltson, L. G., catalytic transformations of the dimeride of $\Delta^{1,3}$ -cyclohexadiene, II, 254.
- Kazantzev, A. A., preparation of pure oxides by ignition of sulphates, I, 209.
- Kazarnovski, I. A. See Reichstein, S. I.
- Kazarnovski, J. S. See Kritschewski, I. R.
- Kazda, F., prophylaxis of post-operative thrombosis and embolism, III, 551.
- Kazim, S., and Mahadevan, C., marble deposits near Yellandu in Warangal district, I, 163.
- Kazimirova, V. F. See Venus-Danilova, E. D.
- Kazumi, H. See Sugawara, S.
- Kazuno, T., and Shimizu, T., degradation of deoxycholic acid to a dihydroxyketone, $C_{19}H_{32}O_5$, and 3:12-diketo-22-methyl- Δ^{20} -norcholesterol, II, 482.
- Kean, C. H., pressure-temperature phase diagram of Na-K alloys and effect of pressure on resistance of the liquid phase, I, 312.

- Kearns, W. M., clinical application of testosterone, III, 1057.
- Keaton, C. M., oxidation-reduction potentials of arsenate-arsenite systems in sand and soil media, I, 83.
- Keefe, C. S., action of sulphanilamide, III, 410.
- and Rantz, L. A., sulphanilamide in treatment of gonococcal arthritis, III, 610. Action of sulphanilamide, III, 773.
- Keefe, H. See Fricke, R.
- Keegan, H. J. See Gibson, K. S.
- Keekem, P. C. van, acid-base theory of Brønsted, I, 24.
- Keen, J. A., comparative size of cochlear canal in mammals, III, 1044.
- Keene, M. F. L., connexions of the posterior commissure, III, 30.
- Keeney, E. L., hemiplegia following injection of epinephrine hydrochloride, III, 911.
- Pierce, J. A., and Gay, L. N., adrenaline in oil, III, 377.
- Keers, W., anthropology of the Sembiring-Marga of Karo-Batak, III, 347. Hair colour changes in *Semnopithecus maurus*, III, 444.
- See also Hagedoorn, A.
- Keeser, E., action of various substances on choline-esterase, III, 321. Action of various substances on histaminase, III, 322. Examination of styptics, III, 551. Action of expectorants, III, 777. Action of organic nitro-compounds, III, 930.
- Keesom, W. H., and Désirant, M., specific heats of tantalum in the normal and in the superconducting state, I, 602.
- and Kurrelmeyer, B., specific heat of iron from 1.1° to 20.4° K., I, 310. Atomic heat of iron from 1.1° to 20.4° K., I, 461.
- See also Laer, P. H. van.
- Keeton, R. W. See Kendrick, A. B., and Spellberg, M. A.
- Keevil, N. B., distribution of helium and radioactivity in rocks. I. Mineral separates from the Quincy granite, I, 106. Application of the helium method to granites, I, 162. Thorium-uranium ratios of rocks and their relation to lead ore genesis, I, 288. Calculation of geological age, I, 346.
- See also Evans, R. D.
- Keffer, W. J., and Welsh, A. E., hæmolytic and toxic properties of sera, III, 119.
- Kefford, J. F. See Davies, W.
- Kegeles, G. See Åkerlöf, G.
- Kehl, R. See Benoit, J.
- Kehoe, R. A., Deichmann-Gruebler, W., and Kitzmiller, K. V., toxic effects on rabbits of pentachlorophenol and sodium pentachlorophenoxide, III, 780.
- Kehrer, E., anatomical, physiological, and pathological significance of the great omentum, III, 805. Uterine hæmorrhage at puberty, III, 913.
- Keiffer, M. H., mechanism of human fertilisation; progression of the sex cells in the ovarian-tubular tract, III, 56. Vegetative nervous system of the human uterus (the uterine horn), III, 56.
- Keil, A. See Steubing, W.
- Keil, W., Appel, H., and Berger, Gerhard, fats from fatty acids having odd numbers of carbon atoms, III, 407.
- and Weyrauch, L., pharmacology and chemistry of fermented feeding-stuffs. V., III, 329.
- Keilin, D., and Hartree, E. F., cytochrome and cytochrome oxidase, III, 719.
- and Mann, T., laccase, a blue copper-protein oxidase from the latex of *Rhus succedanea*, III, 421. Carbonic anhydrase, III, 1096.
- and Smith, E. L., direct perception of pigment in the nerve tissue of human retina, III, 472.
- See also Mann, T.
- Keimatsu, I. See Kondo, H.
- Keiser, S. See Bowman, K. M.
- Keith, A., resurvey of the anatomical features of the Piltown skull; the recently discovered Swanscombe skull. II, III, 347.
- Keith, N. M., pathologic studies of the arterial system in severe hypertension, III, 658.
- Wagener, H. P., and Barker, N. W., types of essential hypertension: course and prognosis, III, 746.
- See also Wakefield, E. G.
- Kekwick, R. A., electrophoretic analysis of normal human serum, III, 893.
- Kellar, R. J., and Sutherland, K., clinical experiences with stilbæstrol, III, 589.
- See also De Valera, E.
- Kellaway, C. H., Holden, H. F., and Trethowie, E. R., tissue energy by radiant energy and liberation of histamine, III, 318.
- and Trethowie, E. R., photodynamic action and liberation of histamine, III, 718.
- See also Feldberg, W.
- Keller, A. D., separation in the brain stem of mechanisms of heat loss from those of heat production, III, 371. Permanent diabetes insipidus possible in absence of pars anterior, III, 379.
- and Hamilton, J. W., degeneration of infundibular nerve fibres in cats without polydipsia, III, 578.
- Keller, C. J., magnesium "resorption" therapy, III, 414.
- and Künzel, O., surface tension of normal and pathological serum, III, 117. Surface activity of water-soluble vitamins, III, 164.
- Keller, H. See Karrer, P.
- Keller, M. See Minot, A. S.
- Keller, R., and Singer, E., electrical potential of cells, III, 644.
- See also Freudenberg, K.
- Keller, W., allergy, parallergy, pathergy, III, 191.
- Keller, W. K. See Doupe, J.
- Kellett, C. E., inguinal hernia in female twins; identification of monozygosity, III, 1022.
- and Thomson, J. G., complementary activity of serum in nephritis, III, 693.
- See also Hall, G.
- Kelley, E. G., reactions of dyes with cell substances. IV. Quantitative comparison of tissue nuclei and extracted nucleoproteins. V. Differential basic dye combination of tissue nuclei with reference to resting and mitotic cells of tumour tissue, III, 321.
- Kelley, K. K., specific heats at low temperatures of manganese, manganous selenide, and manganous telluride, I, 133. Specific heats at low temperatures of crystalline ortho-, meta-, and disilicates of sodium, I, 189. Specific heats at low temperatures of beryllium oxide and beryllium orthosilicate (phenacite), I, 362.
- Kelley, R. B., and Shaw, H. E. B., periodicity of oestrus in Australian merino ewes and a half-bred group, III, 981.
- Kelley, O. R. See Waddell, W. W., jun.
- Kellgren, J. H., distribution of pain arising from deep somatic structures with charts of segmental pain areas, III, 828.
- See also Lewis, T.
- Kellie, A. E., and Zilva, S. S., vitamin-C requirements of man, III, 402.
- Kellner, H., histo-pathology of bones after feeding with fluoride, III, 887.
- Kellogg, J. M. B., Rabi, I. I., Ramsey, N. F., jun., and Zaeharias, J. R., electrical quadrupole moment of the deuteron, I, 176.
- Kelly, C. F. See Day, A. R.
- Kelly, C. J., and Beard, H. H., creatine as a product of methylation, III, 607.
- Kelly, D. H. See Hill, L. F.
- Kelly, K. L. See Judd, D. B.
- Kelly, L. See Snyder, R. G.
- Kelly, P. L., and Petersen, W. E., site of fat synthesis in mammary gland, III, 407.
- Kelsey, F. E., determination of cholesterol, II, 134. Use of lipase in lipid analyses. I. Specificity of castor bean-lipase. II. Specificity of pancreatic lipase. III. Action of castor bean- and pancreatic lipase on blood-neutral fat, III, 1008.
- Kelsey, M. P. See Nelson, J.
- Kémal-Djénab, gastro-duodenal reflex, III, 690.
- Kemkes, B., and Steigler, A., chemotherapy of pneumonia and pneumococcal sepsis, III, 83.
- See also Weber, G.
- Kemmerer, A. R., and Fraps, G. S., digestibility of carotene by rats and chickens, III, 163.
- Kemp, H. J., and Haberman, S., molasses agar for cultivation of the genus *Monilia*, III, 326.
- Kemp, J. E., and Fitzgerald, E. M., experimental congenital syphilis: transference of immunity from immune syphilitic female rabbits to their offspring, III, 332.
- and Rosahn, P. D., oral administration of bismuth in treatment of experimental rabbit syphilis, III, 83.
- Kemper, H. G. See Backer, H. J.
- Kempf, J. E., Nungester, W. J., and Soule, M. H., penetration of antiserum into central nervous system of monkeys infected with poliomyelitis, III, 971.
- Kempf, L. W., and Van Horn, K. R., solubility of lead and bismuth in liquid aluminium and aluminium-copper alloys, I, 70.
- Kempner, W., nature of leukæmic blood cells as determined by their metabolism, III, 647.
- Kempton, J. H. See Maxwell, L. R.
- Kempter, H., and Mecke, R., spectroscopic determination of association equilibria, I, 564.
- Kempton, R. T., differences in elimination of neutral-red and phenol-red by frog kidney, III, 1060.
- Kemula, W., Czornodola, J., and Kopniak, Z., influence of hydrogen on the sensitised photochemical transformation of methane, I, 272.

- Kench, J. E., seasonal cycles of ash, carbohydrate, and nitrogenous constituents in terminal shoots of apple trees: effects of five vegetatively propagated rootstocks. III. Nitrogenous constituents, III, 730.
- and Malkin, T., instability of ammonium salts of higher fatty acids, II, 138.
- Kendall, D. See Bamforth, J.
- Kendall, E. C., metabolic processes influenced by ductless glands [cortin], III, 43.
- Flock, E. V., Bollman, J. L., and Mann, F. C., effect of cortin and sodium chloride on carbohydrate and mineral metabolism in adrenalectomised dogs, III, 260.
- See also Ingle, D. J.
- Kendall, F. E. See Heidelberger, M.
- Kendrick, A. B., Keeton, R. W., and Foley, E. F., immediate and delayed disposal of acacia injected intravenously in the dog, III, 358.
- Kendrick, D. B., jun., treatment of gas gangrene infections in guinea-pigs with neoprontosil, sulphanilamide, and sulphapyridine, III, 999.
- and Wakim, K. G., intra-arterial hypertonic saline solution in experimental shock, III, 823.
- Kennard, E. H., shape of the domains in ferromagnetics, I, 186.
- Kennard, M. A., reorganisation of motor function in the cerebral cortex of monkeys deprived of motor and premotor areas in infancy, III, 373. Alterations in response to visual stimuli following lesions of frontal lobe in monkeys, III, 338.
- Kennaway, E. L. See Bachmann, W. E.
- Kennaway, N. M. See Bachmann, W. E.
- Kennedy, A., effect of cardiazol convulsions on so-called "bulbocapnine catatonias" in monkey, III, 671.
- Kennedy, J. A. See Barcroft, J., and Burwell, C. S.
- Kennedy, J. L., effects of complete and partial lobectomy on thresholds of visual real movement discrimination in the cat, III, 838.
- Kennedy, J. W., and Seaborg, G., search for β -particles emitted during uranium fission process, I, 350.
- See also Seaborg, G. T.
- Kennedy, N. K. See Hanzlik, P. J.
- Kennedy, R. J., value of perimetry in brain lesions, III, 1036.
- Kennedy, R. L. J., xanthomatosis: Schuller-Christian's disease, III, 297.
- Kennedy, T., and Spring, F. S., sterol group. XXXIX. Structures of ergosterol, lumisterol, pyrocalciferol, and isopyrocalciferol, II, 157.
- Kennedy, W. L., Anderson, A. K., Bechdel, S., and Shigley, J. R., influence of gestation, lactation, and age on composition of bovine blood, III, 894.
- Kennedy, W. P., haemoglobin and erythrocyte standards in Iraq, III, 349.
- Kennedy, W. R., incidence of anaemia in women of the low-income class, III, 546.
- Kenner, C. T., and Felsing, W. A., pressure-volume-temperature relations for gaseous monomethylamine, I, 557.
- Kenner, J., and Morton, F., transformation of carboxylic acids into ketones by means of their lead salts, II, 141.
- and Wain, R. L., thermal decomposition of lead salts of α -hydroxycarboxylic acids, II, 158.
- Kenner, J. See also Adamson, D. W.
- Kennett, S. J. See Glass, V.
- Kenney, A. S., and Rapoport, M., crystalline vitamin-C in prophylaxis and treatment of infantile scurvy, III, 496.
- See also Chapple, C. C., Morrison, A. P., Rapoport, M., and Shaw, D. R.
- Kenny, C. L. See O'Brien, S. J.
- Kenny, T. S., Robertson, A., and George, S. W., sumatrol. II. Synthesis of dehydrotetrahydrosumatrol, II, 558.
- Kent, G. C., physical, chemical, and biological properties of a specific bacteriophage of *Pseudomonas tumefaciens*, III, 208. Inhibitory substance formed by *Diplodia zea*, III, 433.
- See also Wilkins, W. H.
- Kent, N. A. See Combes, L. S.
- Kenton, H. B., influence of inflammation on skin-necrotising action of staphylococcus toxin, III, 727.
- Kentamaa, M., demonstration of oxygen in the air, I, 583.
- Kenty, C., convection currents in mercury arcs, I, 50.
- Kenyon, A. T. See Hoskins, W. H.
- Kenyon, J., and Platt, B. C., optical rotatory powers of (+)- γ -methyl-n-heptane, II, 238.
- See also Arcus, C. L., Consden, R., and Downer, E.
- Kenyon, M. B. See Fay, M.
- Kepinov, L., anti-glycogenolytic action of insulin and glycogenotropic action of anterior pituitary hormone, III, 976. Effect of vitamins on functioning of pituitary anterior lobe, III, 992. Cause of inactivity of adrenaline in absence of glycogenotropic hormone, III, 1052.
- Kepl, M., and Gunn, F. D., sulphapyridine and serum therapy in experimental lobar pneumonia of rats, III, 1081.
- Kepler, E. J., Walters, W., and Dixon, R. K., menstruation in a child aged nineteen months as the result of an adrenal cortex tumour, III, 59.
- Walters, W., and Piper, M. C., tumours of the adrenal cortex, III, 42.
- See also Erickson, C. W.
- Keränen, L. See Jalavisto, E.
- Keresztesy, J. C. See Stiller, E. T.
- Kerl, H., hydrogen sulphide apparatus for analytical laboratories, I, 582.
- Kerley, C. G., subthyroidism with defective dental development, III, 41.
- Kerley, L. F. See Heyman, E.
- Kermack, W. O., Spragg, W. T., and Tebrich, W., 3-nitro- and 3-amino-4-hydroxybenzenesulphonamide, II, 259.
- and Weatherhead, (Miss) A. P., nitration of derivatives of 4-hydroxyquinoline, II, 232.
- Kern, B., simplified calculation of the basal metabolic rate, III, 404. Electrocardiographic changes in chronic rheumatism, III, 455.
- Kern, J., radiation from the high-pressure discharge in mercury vapour in different spectral regions, I, 1.
- and Schulz, P., merging of spectral lines in radiation from the high-pressure mercury discharge in relation to power, pressure, and tube diameter, I, 166.
- Kern, R. A., asthma due to sensitisation to a mushroom fly (*Aphiochaeta agarici*), III, 92. Asthma and allergic rhinitis due to sensitisation to phthalic anhydride, III, 618.
- and Langner, P. H., protamine and allergy, III, 1090.
- Kern, R. A. See also Langner, P. H.
- Kern, W., macromolecular compounds. CCXV. Osmotic pressure of aqueous solutions of multivalent acids and their salts. CCVIII. Osmotic pressure of aqueous solutions of multivalent acids and their salts with uni- and bi-valent bases. CCXX. Dissociation of multivalent macromolecular acids, I, 417, 469, 521.
- and Fricke, W., isolation and determination of conduritol in condurango bark, III, 803.
- and Momsen, H., contents of condurango bark. I, III, 219.
- Kernohan, J. W. See Adson, A. W.
- Kernwein, G., Fahey, J., and Garrison, M., fate of tendon, fascia, and elastic tissue transplanted into bone, III, 223.
- Kerppola, W., clinical characters and occurrence of different forms of icterus, III, 594. Pseudo-achylia, III, 689. Hypophysis deficiency in under-sized persons, III, 839.
- Kerr, J. A., [respiratory paralysis in] poliomyelitis treated by tilting stretcher, III, 240.
- Kerr, P. F. See Burke, H. E.
- Kerr, R. B. See Himsworth, H. P.
- Kerr, W. R. See Common, R. H.
- Kerridge, P. M. T., Paul, R. W., Reynolds, R. J., Reynolds, S. J., Reynolds, S. R., and Tookey, G. W., cineradiographic films illustrating normal respiration and artificial respiration with Bragg-Paul pulsator, III, 563.
- See also Briggs, G., and Greenbaum, A.
- Kerschbaum, E., Kleedorfer, A., Prillinger, F., Wessely, F., and Zajic, E., specificity of synthetic oestrogenic compounds, II, 259.
- Kerst, D. W. See Herb, R. G.
- Kersten, H., and Chace, A. M., rubber-lined tapered vacuum joint, I, 583.
- See also Dwight, C. H.
- Kersten, H. J. See Highberger, J. H.
- Kertesz, D. See Califano, L.
- Kertész, F., activity of the cadmium ion in various organic salts of cadmium, I, 80. Conductivity of cadmium monochloroacetate; activity of the cadmium ion, I, 200.
- Kertesz, Z. I., pectic enzymes. II. Pectic enzymes of tomatoes. III. Heat-inactivation of tomato pectin-methoxylase (pectase). IV. Structure and enzymic hydrolysis of pectins, III, 99, 723, 1009. Alleged ascorbic acid component of liver esterase, III, 422.
- Kertscher, F., Siemens apparatus for spectrophotometric determination of potassium in plant ash from Neubauer tests, III, 341.
- Kerven, A. M., and Liard, J., resuscitation of the apparently dead, III, 661.
- Keseling, B., hyperthyroidism from iodised salt, III, 138.
- Kesler, T. L., sienna ("ocher") deposits of the Cartersville District, Georgia, I, 587.
- Kessler, M., electrocardiogram in induced malaria, III, 820.
- Kessler, R., and Tischendorf, W., fluorescence photometry of human serum, III, 893.
- Kesten, H. D., Mulinos, M. G., and Pomerantz, L., pathological effects of glycols and related compounds, III, 617.
- Kestermann, E., and Schleinig, T., experiences with depot insulin, III, 681.

- Keston, A. S., Rittenberg, D., and Schoenheimer, R., protein metabolism. IV. Stability of nitrogen in organic compounds, II, 143.
- See also Rittenberg, D., and Schoenheimer, R.
- Keszytüs, L., and Martin, János, effect of sympathetic and chorda stimulation on composition of the submaxillary saliva, III, 483.
- Ketchum, B. H., development and restoration of deficiencies in phosphorus and nitrogen composition of unicellular plants, III, 792.
- Ketelaar, J. A. A., solubility in the solid state: mixed crystals, I, 71. Quantum-mechanical discussion of the dipole moments of monochlorobenzene and of vinyl chloride, I, 242. Quantum-mechanical discussion of the carbon-chlorine bond in the chlorine substitution derivatives of ethylene and benzene, I, 242. Co-operative phenomena in transformations in the solid state, I, 460.
- and Wegerik, (Frl.) E., crystal structure of potassium fluorochromate, I, 12. Crystal structure of caesium fluorochromate, I, 600.
- and Zwartsenberg, J. W., crystal structure of cyanogen halides. I. Structure of cyanogen iodide, I, 306.
- See also Sherman, J.
- Ketomaa, A., anaerobic determination of p_{H_2} of blood and other physiological solutions, III, 538.
- Ketteringham, R. C. See Smith, J. T.
- Keutmann, E. H., Bassett, S. H., and Warren, S. L., electrolyte balances during artificial fever with special reference to loss through the skin, III, 514.
- See also Bassett, S. H.
- Keutner, E., and Potapenko, G., dispersion and absorption of short electric waves and molecular structure, I, 182.
- Kevorkian, A. Y., treatment of chronic pruritus vulvæ with local applications of oestrogen, III, 981.
- Key, J. A. See Hench, P. S.
- Keyes, F. G. See Collins, S. C.
- Keys, A., effects in man and dogs of massive doses of insulin on composition of the blood-serum, III, 49. Oxygen saturation of the venous blood in normal human subjects, III, 241.
- and Butt, H. R., filtration processes in extremities due to 'standing', III, 363.
- and Friedell, H. L., size and stroke of the heart in young men in relation to athletic activity, III, 235. Measurement of heart size with Roentgenkymograph, III, 895. Quantitative measurement of valvular efficiency of the human heart, III, 1031. Measurement of stroke output of the human heart by Roentgenkymography, III, 1031.
- Matthews, B. H. C., Forbes, W. H., and McFarland, R. A., individual variations in ability to acclimatise to high altitude, III, 24.
- See also Butt, H. R.
- Keys, A. B. See Redfield, A. C.
- Keys, O. H., standardisation of 2:6-dichlorophenol-indophenol for ascorbic acid titration, II, 351.
- Khalap, V. S. See Mankodi, C. L.
- Khalsa, R. G. See Fordham, S.
- Khambata, B. S., and Wassermann, A., mechanism of additions to double bonds. VIII. Equilibrium of gaseous associations, I, 261. Mechanism of cracking. I. Kinetics of inverse diene syntheses in solution and in the pure liquid state, I, 269.
- See also Benford, G. A.
- Khan, H., ovulation in fish; effect of administration of extract of anterior lobe of pituitary gland, III, 379.
- Khanolkar, A. P., and Wheeler, T. S., chalkones; synthesis of 1-p-alkoxy-arylideno-5:6-benzocoumaran-2-ones, II, 83.
- Kharasch, M. S., and Brown, Herbert C., chlorinations with sulphuryl chloride. I. Peroxide-catalysed chlorination of hydrocarbons, II, 497.
- and Clapp, H. G., reactions of epoxy-compounds with reagents. I. Interaction of epoxyphenylethane (styrene oxide) and magnesium aryl halides, II, 60.
- Fineman, M. Z., and Mayo, F. R., oxygen effect in the reaction of cyclopropane with bromine and with hydrogen bromide, II, 497.
- and Gladstone, M., other peroxides, II, 531.
- Kleiger, S. C., and Mayo, F. R., peroxide effect in the addition of reagents to unsaturated compounds. XXI. "Normal" and "abnormal" additions of hydrogen bromide, II, 530.
- LeGault, R. R., and Sprowls, W. R., decomposition of unsymmetrical organomercuric compounds; establishing the relative electronegativities of organic radicals, II, 191.
- May, E. M., and Mayo, F. R., peroxide effect in the addition of reagents to unsaturated compounds. XVIII. Addition of and substitution by bisulphite, II, 1.
- Pines, H., and Levine, (Miss) J. H., decomposition of unsymmetrical organomercuric compounds; establishing relative electronegativity of organic radicals. III., II, 94.
- and Sternfeld, E., synthesis of polyenes. I. Hexatriene and its polymerides, II, 498.
- Sternfeld, E., and Mayo, F. R., reaction of esters with sodium in liquid ammonia, II, 97.
- and Swartz, S., decomposition of unsymmetrical organomercuric compounds; establishing relative electronegativity of organic radicals. IV., II, 102.
- Walling, C., and Mayo, F. R., addition of hydrogen halides to *cis*- and *trans*- Δ^2 -pentalene, II, 399.
- See also Brown, W. G., and Walling, C.
- Khastgir, S. R., and Sirajuddin, K., influence of distortion through non-linear rectification on measurement of dielectric constants by the heterodyne method, I, 182.
- Khoi, N. D., antigenic value of various chemical fractions of the tubercle bacillus towards blood serum and the pleural fluid in tuberculosis, III, 528.
- Khol, F., measuring elastic constants and phase velocity of transverse and longitudinal waves, I, 187.
- Khouvine, (Mme.) Y., Arragon, G., and Tomoda, Y., ketoses. II. Structure of α -D-tagatose, II, 142.
- and Gregoire, J., phosphorus partition in the larvæ, pupæ, and imago of *Calliphora erythrocephala*, III, 762.
- and Valentin, F., tritylation of α -L-sorbose, II, 9.
- Kiang, A. T. See Wu, T. Y.
- Kiang, L. E. See Radsma, W.
- Kibler, A. L., evaluating the safety of an anæsthetic, III, 314.
- Kihler, C. S. See Watson, S. H.
- Kidd, F. See Zilva, S. S.
- Kidd, G., immunological reactions with a virus causing papillomas in rabbits. I. Demonstration of a complement-fixation reaction; relation of virus-neutralising and complement-binding antibodies. II. Properties of the complement-binding antigen in extracts of growths. III. Antigenicity and pathogenicity of extracts of growths of wild and domestic species, III, 69.
- and Rous, P., carcinogenic effect of a papilloma virus on the tarred skin of rabbits. II. Major factors determining the phenomenon: manifold effects of tarring, III, 158.
- See also Rous, P.
- Kieling, A. See Pinkerton, H.
- Kielland, specific thermodynamic properties of dilute ionic solutions, I, 419. Properties of dipicrylamines, I, 559.
- and Tronstad, L., preparation of anhydrous beryllium chloride from beryllium oxide through beryllium carbide, I, 379.
- Kienitz, H., and Rombock, L., micro-determination of rhodium with thionalide, I, 537.
- Kienle, theory of the Schwarzschild effect, I, 330.
- Kienle, F., traumatic infarction of the posterior heart wall, III, 19. Prognosis of arborisation block, III, 235. Electrocardiogram in left ventricular hypertrophy, III, 455.
- and Malamani, V., signs of right ventricular lesions, III, 455.
- Kienle, R. H., Meulen, P. A. van der, and Petko, F. E., polyhydric alcohol-polybasic acid reactions. III. Glycerol-phthalic anhydride reaction. IV. Glycerol phthalate from phthalic acid, II, 506.
- Kies, M. W., Dyer, H. M., Wood, J. L., and Du Vigneaud, V., utilisation of the optical isomerides of *N,N'*-dimethylcystine, II, 249.
- See also Du Vigneaud, V.
- Kiese, M., and Hastings, A. B., dissociation constant of hypobromous acid, I, 370.
- Kieser, K., measurement of turbidity, I, 580.
- Kiess, C. C., and De Bruin, T. L., second spectrum of chlorine and its structure, I, 589.
- Kiess, M. A. See Smith, L. I.
- Kiesselbach, A. See Wetzel, G.
- Kiessig, H., lattice structure of natural cellulose, I, 407.
- See also Hess, K., and Sobue, H.
- Kiessling, W., new enzymic protein from yeast; reversible enzymic synthesis of glycogen, III, 519. Enzyme-protein complex which phosphorylates glycogen; reversible enzymic synthesis of glycogen, III, 940.

- Kiguchi, S., experimental studies on the O-inagglutinability and vi-antigen of *B. typhosus*, III, 528.
- Kihara, Y., partial oxidation of starch by bromine, II, 143. Alkaloids in bulbs of *Narcissus tazetta*, L., II, 233.
- Kijewska, M. See Dominikiewicz, M.
- Kik, M. C., effect of methionine on casein metabolism, III, 283. Biological value of proteins of rice and its by-products, III, 700.
- Kikoin, A. K., thermal conductivity of solid helium, I, 604.
- Kikuchi, Seishi, and Aoki, H., electron-neutron interaction, I, 56. Scattering of D-D neutrons, I, 171.
- Aoki, H., and Wakatuki, T., angular distribution of the fast neutrons scattered by atoms, I, 443.
- Kikuth, W., chemotherapy of malaria and recent advances in parasitology, III, 504. Chemotherapy of tropical diseases, III, 867.
- and Mudrow, L., chemotherapeutic investigation on the endothelial forms of *Plasmodium cathemerium*, III, 1098.
- Kikuti, S., sp. gr. of liquefied ammonia solutions of ammonium and ammonia chlorides, I, 250.
- Kilby, B. A., and Kipping, F. B., [attempted] synthesis of irone, II, 199.
- Kilde, G., heavy water, I, 331.
- Kile, R. L., treatment of lupus vulgaris by injections of starch U.S.P. (maize starch), III, 1092.
- and Pepple, A. W., poison-ivy hypersensitiveness in guinea-pigs, III, 91.
- Kilian, H. See Klemm, W.
- Killingworth, W. P. See Aldrich, C. A.
- Kilmer, G. W. See Fieser, L. F.
- Kilpatrick, M. See Leininger, P. M., and Minnick, L. J.
- Kim, C. H., fate of dehydro- and dehydrodeoxy-cholic acid in the rabbit, III, 74. Enzymic hydrogenation of dehydrodeoxycholic acid by yeast. II, III, 719.
- Sihn, T. S., and Takahashi, Kumao, bile of carnivores; otter (*Lutra*), fox (*Vulpes pecculiosus*), and weasel (*Mus-tela itati*), III, 595.
- See also Ashikari, H., and Sihn, T. S.
- Kim, K. W. See Kawaguchi, R.
- Kim, S. S. See Yun, I. S.
- Kimball, A. C. See Florsdorf, E. W.
- Kimball, E. R., jun. See Toomey, J. A.
- Kimball, O. P., treatment of epilepsy with sodium diphenyl hydantoinate, III, 749.
- Kimble, M. S., photo-colorimetric determination of vitamin-A and carotene in human plasma, III, 818.
- Kimmel, L. See Morgan, A. F.
- Kimmelstiel, P., acute haematogenous interstitial nephritis, III, 391.
- Kimmig. See Vonkennel.
- Kimmig, J., and Düker, R., protection against ultra-violet light erythema, III, 937.
- Kimura, G., and Cornwell, W. S., progestin content of corpus luteum of the sow during oestrus cycle and pregnancy, III, 384.
- Kimura, K. See Nishina, Y.
- Kimura, M., scattering of D group neutrons, I, 443. Non-additivity in scattering cross-sections of slow neutrons. I, 545.
- See also Nishina, Y.
- Kimura, O., effect of an electric field on viscosities of liquids [solutions], I, 516.
- Kimura, S., Kokubo, Y., and Shindo, M., blood picture in scarlet fever and its fluctuations during the course, III, 546. Hematology of puvria in children, III, 546.
- Kimura, T., and Sugiyama, G., degradation of hydoxycholeic acid to bisnorhydoxycholeic acid and pregnane-3:6-diol-20-one, II, 481.
- Kimura, W., Nakano, S., and Taniguchi, H., surface properties of aqueous solutions of sodium salts of higher alkyl-sulphonic acids, I, 468.
- Omura, T., and Taniguchi, H., synthesis of alcoholic derivatives of the fatty series. I. Catalytic hydrogenation of phenylstearic acid under pressure, II, 60.
- and Taniguchi, H., capillary-active properties of aqueous solutions of the sodium salts of higher alkylsulphuric acids, I, 415. Influence of sodium sulphate on the capillary-active properties of aqueous solutions of [sodium salts of] higher alkylsulphuric acids, I, 415. Preparation of the pure sodium salts of higher alkyl sulphuric esters, II, 355. Arylation of oils and fats. II. Crystalline derivatives of phenylstearic acid; syntheses of the S-benzylthiuronium salt, p-substituted phenacyl esters, and p-xenylamide of phenylstearic acid, II, 504.
- Kimura, Y., 3-hydroxyflavanone derivatives. I. New synthesis, II, 441.
- Kin, L. C. See Hoi, B.
- Kin, S., physicochemical nature of "neutrophiline," III, 114.
- Kincaid, J. F., and Eyring, H., liquid state, I, 135.
- Kindinger, M., and Koller, K., behaviour of extremely thin metallic films under various conditions, I, 13.
- Kindler, K., Peschke, W., and Plüddemann, G., synthesis of pharmacologically important amines. XII. Di- and tetra-hydrobenzoquinolines as protozoa-poisons, II, 181.
- See also Rabe, P.
- Kindred, J. E., quantitative study of the lymphoid organs of the albino rat, III, 15.
- King, Alexander, and Mukerjee, L. N., emulsification and chemical reaction, I, 204. Stability of emulsions. I. Soap-stabilised emulsions, I, 468.
- and Wrzeszinski, G. W., influence of electrolytes on emulsion type and stability, I, 415.
- See also Bennister, H. L., Bhatnagar, S. S., and Cameron, A.
- King, A. S., temperature classification of europium lines, I, 502.
- See also King, R. B., and Russell, H. V.
- King, B. G. [with Standerwick, H. F., Schier, W. W., and Steinman, J. F.], comparison of pulmonary ventilation in three methods of artificial respiration, III, 240.
- King, C. G., physiology of vitamin-C, III, 288. Chemistry of vitamin-C, III, 290.
- See also Daubert, B. F., Green, L. F., and Musulin, R. R.
- King, C. V. See Abramson, M. B.
- King, E. J., biochemistry of silicic acid. VIII. Determination of silica, III, 735.
- and Delory, G. E., rates of enzymic hydrolysis of phosphoric esters, III, 941.
- King, E. J., and Nicholson, T. F., phenyl phosphoric esters, II, 474.
- and Roman, W., biochemistry of tauric acid. VII. Depression of apparent solubility of silica in body-fluids, III, 441.
- and Small, C. W., phosphoric esters^{2f} pancreas: sphingosine choline phosphate, III, 985.
- King, F. See Lowan, A. N.
- King, F. E., and Robinson, (Sir) R., application of the Bischler-Napieralski reaction to δ -ketoazelaodi- β -veratrylethylamide, II, 85.
- King, F. H., and Leslie, A., oxygen saturation of arterial blood in the cyanosis from sulphanimide, III, 82.
- King, George, oxidation of θ -dihydroxy-stearic acids by periodic acid; η -aldehyde-octoic acid, II, 5.
- King, G. B. See Welton, R. C.
- King, G. C., encephalography in rapidly progressing cerebral atrophy due to trauma, III, 1037.
- King, G. M., Jones, J. W., and Orton, H., behaviour of mature male salmon parr, *Salmo salar*, juv. L., III, 488.
- King, G. W., and Van Vleck, J. H., dipole-dipole resonance forces, I, 454. Relative intensities of singlet-singlet and singlet-triplet transitions, I, 594.
- King, H., synthesis of diphenyl ethers containing methoxy- and ethoxy-groups, II, 417. Curare alkaloids. IV. Beberine and tubocurarine; orientation of phenolic groups, II, 458. Amphiporine, an active base from the marine worm *Amphiporus lactiflorus*, III, 916.
- and Ware, L. L., 4-thiopyridone and derived substances, II, 339.
- and Wright, E. V., guanidyl- and guanidonaphthalenes; group migration in cyanonaphthalenes, II, 151. Phthalic esters as alkylating agents, II, 416.
- King, H. E., hypertension in acute renal insufficiency, III, 658.
- King, D., microscopic structure of enamel, III, 544.
- and Croll, J. M., dental caries, carbohydrates, and *B. acidophilus*, III, 278.
- King, T., and Henschel, A. F., influence of cultured tissue fragments on sulphanimide inhibition of β -streptococci, III, 1082.
- King, L. F., relative rates of alcoholysis of aralkyl p-nitrobenzoates, I, 570.
- King, R. B., and King, A. S., multiplet intensities from electric furnace absorption spectra of Fe r and Ti r, I, 49.
- King, W. B., and Brown, F. E., modification of Bettendorff's arsenic test. II. Catalysed by mercury, I, 336.
- Kingsbury, B. F., post-partum formation of egg cells in cat, III, 806.
- Kingsbury, R. M. See Yanovsky, E.
- Kinney, C. R., system correlating molecular structure of organic compounds with their b.p. I. Aliphatic b.p. numbers, I, 134.
- See also Jones, R. G.
- Kino, K., acid- and alkali-resisting properties of higher ketones, and their solubilities in organic solvents, II, 49. Hydrogenation of higher ketones with catalysts consisting mainly of nickel or copper, II, 49. Hydrogenation of a higher secondary alcohol by nickel catalysts containing manganese, zinc, or thorium, II, 401. Stability of a higher ketone and a higher secondary alcohol towards heat, II, 406.

- Kinose, S. See Hukuhara, T.
- Kinoshita, H., electrodialytic "washing" of *Paramedium*, III, 725. Electrical stimulation of *Paramedium* with linearly increasing current, III, 873.
- Kinoshita, M., Uchiyama, K., and Nakajima, T., penetration of light through dense fog, I, 238.
- Kinouchi, T. See Horii, Z.
- Kinsel, K., carbohydrate utilisation by maize *Diplodias*, III, 201.
- Kinser, J. H. See Goldich, S. S.
- Kinsey, E. L. See Ellis, J. W.
- Kinsman, G., Sheldon, D., Jensen, Elisabeth, Bernds, M., Outhouse, J., and Mitchell, H. H., utilisation of the calcium of milk by preschool children, III, 1065.
- See also Outhouse, J.
- Kip, A. F. See Evans, R. D.
- Kiparisov, G. N. See Pamfilov, A. V.
- Kipfer, P. See Stahel, E.
- Kipping, F. B., and Wild, F., synthesis of vitamin-A methyl ether, II, 503.
- See also Kilby, B. A.
- Kirby, G. W., Drill, V., and Frey, C. N., aerobic fermentation; effect of glutathione, cysteine, and hydrogen sulphide, III, 724.
- Kirch, E. R., hydrolytic cleavage and oxidation of soya-bean meal by *Penicillium luteum purpurogenum* and *Aspergillus niger*, III, 1098.
- Kirchheiner, E. See Prévot, A. R.
- Kirchhoff, H. See Schmidt, E. W.
- Kirchmann, L., detoxication of quinidine by sympathol, III, 930.
- See also Diehl, F., and Stepp, W.
- Kirgis, H. D. See Harman, M. T.
- Kirian, V., and Soloviev, L., effect of heavy metals on arginase, III, 422.
- Kiriushchin, F. V. See Schur, I. B.
- Kirjalov, N. P., acids of the juice of *Euphorbia biglandulosa*. I. and II., II, 122, 357. Action of hot concentrated alkaline solutions on biglandulic acid, II, 357.
- Kirk, E., determination of red cell size with Bock's halometer, III, 5. Concentration of individual phosphatides (lecithin, cephalin, ether-insoluble phosphatide) and of cerobrosides in plasma and red blood cells in pernicious anaemia before and during liver treatment, III, 228. Isotonic sodium bicarbonate solution in diabetic coma, III, 582.
- Kirk, M. M., and Tressler, D. K., determination of ascorbic acid by electrometric titration, III, 769.
- Kirk, P. L., and Gibson, C. S., refractive index measurements in qualitative organic micro-analysis, II, 461.
- See also Dunn, R.
- Kirk, R., sulphanilamides and rabies, III, 410.
- McKelvie, A. R., and Hussein, H. A., sulphanilamide in treatment of trachoma, III, 82.
- Kirk, W. G., effect of ingestion of irradiated yeast, moulds, and ergosterol on antirachitic potency of ewe's milk, III, 1073.
- Kirkendall, E., Thomassen, L., and Upthegrove, C., rates of diffusion of copper and zinc in a-brass, I, 69.
- Kirkman, H., and Severinghaus, A. E., Golgi apparatus. I.—III., III, 2, 225.
- Kirkman, N. F., effect of low-porphyrin diet on erythropoiesis and hemoglobin regeneration, III, 646.
- Kirkpatrick, E. C. See Marvel, C. S.
- Kirkpatrick, H. A., and Du Mond, J. W. M., shape of the modified Compton line for hydrogen and Ceylon graphite scatterers, I, 51.
- Kirkpatrick, P. See Veith, W.
- Kirkwood, J. G., order and disorder in liquid solutions, I, 136. Theory of optical activity, I, 182. Skeletal modes of vibration of long chain molecules, I, 454.
- and Westheimer, F. H., electrostatic influence of substituents on the dissociation constants of organic acids. I. and II., I, 472.
- See also Bethe, H. A.
- Kirrmann, A., ethylenic [linking] frequency in vinyl ethers, I, 179. Raman effect: characteristic frequency of the ethylenic linking, I, 355.
- Kirsanov, A. V., and Naschtschenko, J. N., alkylacetylonylbarbituric acids, II, 284.
- Kirsanova, V. A. See Drboglav, M. A., and Gudet, M. A.
- Kirsch, J., action of pyrazolone derivatives in focal infection, III, 1084.
- Kirschbaum, A. See Lits, F. J.
- Kirschner, M., local anaesthesia, III, 187.
- Kirshbaum, J. D., and Teitelman, S. L., malignant tumour of the greater omentum simulating a glomangioma, III, 363.
- Kirson, B. See Bobtelsky, M. M.
- Kirtz, M. M. See Loeb, L.
- Kirvalidze, I., spectral distribution of the absorption coefficient in X-rayed sodium chloride crystals in the case of disappearance of inner tensions, I, 177.
- Kishi, S., Fujiwara, T., and Nakahara, W., comparison of chemical composition between hepatoma and normal liver tissues. VII. Cathepsin, dipeptidase, and tripeptidase, III, 389.
- Kissel, P. See Lamy, M.
- Kisseleva, P. See Petrov, S.
- Kissely, G., role of lipins in intercellular substance, III, 1007.
- Kissin, B. I., Lukanin, G. I., and Mikelman, V. A., laboratory apparatus for conducting reactions under pressure, I, 160.
- Kistiakowsky, G. B., Lacher, J. R., and Ransom, W. W., internal rotation of propane and propylene; origin of the internal restricting potentials, I, 62.
- Lacher, J. R., and Stitt, F., low-temperature gaseous heat capacities of ethane and hexadeuterethane, I, 362.
- and Ransom, W. W., polymerisation of gaseous butadiene, I, 614.
- and Rice, W. W., gaseous heat capacities. I. Method and heat capacities of ethane and hexadeuterethane, I, 362.
- See also Conn, J. B., and Crawford, B. L., jun.
- Kiszely, G., role of lipins in the intercellular substance, III, 740.
- and Bugyi, B., capillary luminescence and nature of histological dyes, III, 644.
- Kitagawa, H. See Shibata, Z.
- Kitagawa, T., emission spectrum of flame of bromine burning in hydrogen and mechanism of reaction, I, 148.
- Kitagawa, Y., blood-lipoid after ingestion of liver and other cell constituents, III, 13.
- Kitahara, K., lactic acid bacteria from milk and dairy products, III, 329. Enzymes of lactic acid bacteria. II. Lactic dehydrogenase, III, 516.
- Kitamura, R., reaction between organic sulphur compounds and hydrogen peroxide. XI. Cyclic sulphur compounds. XII.—XIV., and XX. Constitution of atipyrine and related compounds. XV. Compounds containing C=C=S. XVI. Synthesis of compounds of a new type; thioperimino-acids. XVIII. Action of neutral hydrogen peroxide on thio-carbamides; synthesis of amino-iminomethanesulphinobetaines. XIX. Mechanisms of reaction, II, 394, 410, 450, 456.
- and Masuda, F., reaction between organic sulphur compounds and hydrogen peroxide. XVII. Gravimetric microanalysis of organic sulphur compounds. III., II, 462.
- Kitasato, Z., constitution of acid sapogenins. XIV. Hederagenin and oleanolic acid, II, 30.
- Kitchen, S. F., Webb, E. L., and Kupper, W. H., influence of malarial infections on the Wassermann and Kahn reactions, III, 876.
- Kitchin, P. C. See Berman, M., and Edwards, L. F.
- Kitching, J. A. See Pease, D. C.
- Kittel, C., radioactivity of ^6Li , I, 294.
- Kittel, F. See Späth, E.
- Kitzmiller, K. V. See Kehoe, R. A.
- Kiu, T., blackening curve of [photographic] plates in the under-exposure region, I, 153.
- Kivinen, E., dopplerite from Kouru, Central Finland, I, 641.
- Kiyono, K., Sugiyama, S., and Amano, S., theory of vital staining, III, 445.
- Kiyoto, Y., bile acid in Weil's disease, III, 430.
- Kizel, A. R., and Roganov, O. P., action of trypsin fermentation complex on substituted proteins, III, 423.
- Kjems, H., and Bjering, method of determining diabetogenic hormone in urine, III, 906.
- Klaas, R. See Sweany, H. C.
- Klahn, H., rate of solution of calciferous inorganic and organic substances in an aqueous medium, I, 528.
- Klahn, J., pernocton twilight anaesthesia and foetus, III, 714.
- Klami, A. See Komppa, G.
- Klapdohr, H., treatment of gonorrhoea with uleron and albugid during pregnancy, III, 999.
- Klar, E., metabolism during hibernation, III, 78. An egg cell hormone, III, 685. Action of various carotenoids on onset of hibernation, III, 918.
- Klarer, W. See Miescher, K.
- Klarfeld, B., limits of applicability of the theory of low-pressure plasma, I, 228. Positive column of a gaseous discharge, I, 503.
- and Gusjeva, L., breakdown voltage in mercury vapour, I, 302.
- and Poletaev, I., gas rarefaction at constrictions in the positive column, I, 440. Pressure gradient in the positive column, I, 440.
- Klasens, H. A., and Backer, H. J., molecular symmetry of monoisopropyl tritert.-butyl tetrathio-orthosilicate, I, 600.

- Klatschko-Gurvitsch, *L. L.* See Kobosev, *N. I.*
- Klatskin, *G.*, response of diabetics to a standard test dose of insulin, III, 50.
- Klauder, *J. V.* See Weidman, *F. D.*
- Klaus, *E. J.*, and Albert, *A. H.*, morphological and functional changes of the heart during Valsalva's experiments in young athletes. I., III, 19.
- See also Albert, *A. H.*
- Klawans, *A. H.* See Kanter, *A. E.*
- Kleczkowska, *J.*, and Kleczkowski, *A.*, inheritance of precipitin formation in rabbits, III, 1106.
- Kleczkowski, *A.*, carbohydrate and lipid contents of fractions of serum-albumin from the horse, III, 233.
- See also Kleczkowska, *J.*
- Kleedorfer, *A.* See Kerschbaum, *E.*, and Wessely, *F.*
- Kleeefeld, *E. A.* See Levin, *C. M.*
- Kleemann, *A.* See Fierz-David, *H. E.*
- Kleerekoper, *L.* See Michels, *A.*
- Klees, *E.* See Winkler, *H.*
- Kleese, *W.* See Schröder, *Wilhelm.*
- Kleiber, *A.* See Erlenmeyer, *H.*
- Kleiber, *M.*, and Cole, *H. H.*, body size and energy metabolism in growth hormone rats, III, 906.
- See also Winchester, *C. F.*
- Kleiger, *S. C.* See Kharasch, *M. S.*
- Klein, *A.* See Hein, *F.*
- Klein, *A. D.* See Smith, *P. W.*
- Klein, *A. K.*, and Vorhes, *F. A.*, *jun.*, determination of arsenic, I, 277.
- Klein, *C.* See Saland, *G.*
- Klein, *H.* See Palmer, *C. E.*
- Klein, *H. W.*, coffee and sport efficiency, III, 187.
- Klein, *I. F.* See Kohn, *J. L.*
- Klein, *J. R.*, effect of thyroid feeding and thyroidectomy on the oxidation of amino-acids by rat kidney and liver, III, 680.
- See also Kohn, *H. I.*
- Klein, *Louis.* vitamin-C in bone and muscle development, III, 168.
- See also Wilkinson, *J. F.*
- Klein, *M.*, artificial prolongation of life of corpus luteum of pregnancy in rabbit, III, 756. Behaviour of uterine horn and mammary gland during persistence of corpus luteum of pregnancy, III, 756.
- and Mayer, *G.*, technique for introducing luteinising substance into the Graafian follicle, III, 58. Effects on ovary and pregnancy in the rabbit of introducing luteinising substance into the Graafian follicles, III, 58.
- Klein, *R. I.* See Levinson, *S. A.*
- Klein, *S. H.*, and Weinberg, *T.*, Spalteholz clearing method applied to determination of carcinomatous metastases in regional lymph nodes, III, 159.
- Klein, *Wilhelm.* blood of warm-blooded animals in relation to constitution, III, 645.
- Schmid, *H.*, Studt, *E.*, and Müller, utilisation of molasses amides by ruminants; partial replacement of amides by synthetic nitrogen compounds, III, 607.
- Klein, *Willibald.* enzymic hydrolysis of cholesteryl esters. II., III, 785.
- and Malamani, *V.*, enzymic cleavage of cholesterylphosphoric acid, III, 788.
- Kleinberg, *J.*, Taebel, *W. A.*, and Audrieth, *L. F.*, sulphamic acid in the separation of the rare earths, I, 488.
- See also Audrieth, *L. F.*, and Glasoe, *P. K.*
- Kleine, *H. O.*, sparteine as uterine stimulant, III, 613.
- Kleiner, *G.* See Herzog, *F.*
- Kleinert, *G.* See Haberland, *G.*
- Kleinfeller, *H.*, dehydration of acetylenic glycols, II, 163.
- and Lohmann, *H.*, course of reaction giving rise to acetylenebismagnesium bromide, I, 85.
- and Trommsdorff, *H.*, the "two forms" of symmetrical tetrabenzoylthane, II, 70. Non-incidence of furan ring-closure in dehydration of $\alpha\delta$ -diketones, II, 163.
- Kleinholz, *L. H.*, reptilian colour changes. II. Pituitary and adrenal glands in regulation of the melanophores of *Anolis carolinensis*. III. Control of light phase and behaviour of isolated skin, III, 1046.
- and Rahn, *H.*, distribution of intermedin in pars anterior of chicken pituitary, III, 578.
- Kleinman, *A.* See Lightbody, *H. D.*
- Kleinschmidt, *A.*, palatine tonsil of gorilla, III, 805.
- Kleinwachter, *H.* See Günther-Schulze, *A.*
- Kleinzeller, *A.*, and Werner, *Henry.* catalase activity during development of the chick embryo, III, 643.
- See also Bank, *O.*
- Kleist, *K.*, and Gonzalo, *J.*, thalamic and subthalamic syndromes, disturbances of single thalamic nuclei, III, 372.
- Kleitman, *N.* See Mullin, *F. J.*
- Klemen, *R.*, effect of nitrogenous substances on the determination of maltose by the methods of Bertrand, Willstätter and Schudel, and Auerbach and Bodländer, III, 110. Applicability of various protein precipitants in the determination of sugar in grain autolysates, III, 222.
- and Škerlak, *T.*, determination of maltose by Bertrand's method, II, 235.
- and Stucin, *D.*, rate of sugar production in wheat autolysates as determined by various methods, III, 536.
- See also Samec, *M.*
- Klemenc, *A.*, electrolysis in the glow discharge. X. Use of alternating current. XI. Formation and constitution of persulphuric acid and Caro's acid, I, 152.
- and Heinrich, *G.*, electrolysis in the glow discharge. IX. Formation of detonating gas from metastable water molecules, I, 152.
- Klemens, *F.*, parathyroid insufficiency, III, 680.
- Klement, *R.*, isomorphous replacement of phosphorus in apatite by silicon and sulphur, I, 155. Sodium calcium sulphate apatite, $\text{Na}_2\text{Ca}_4(\text{SO}_4)_6\text{F}_2$, I, 585. Basic phosphates of bivalent metals. IV. Strontium hydroxyapatite, I, 622.
- and Dihn, *P.*, calcium alkali phosphates, I, 90. Basic phosphates of bivalent metals. III. Barium hydroxyapatite, I, 91.
- Klemm, *A.*, cataphoresis of gas bubbles, I, 24.
- See also Berger, *E.*
- Klemm, *K.* See Friedman, *Leo.*
- Klemm, *L.*, magnetochemical studies. XXXIII. Magnetic behaviour of elements, I, 360.
- Klemm, *O.* See Rupe, *H.*
- Klemm, *W.*, magnetism and chemistry, I, 308, 460. Applications of magnetism, particularly in inorganic chemistry, I, 511.
- and Bommer, *H.*, metals of the rare earths, I, 361.
- and Doll, *W.*, bi- and quadri-valent compounds of the rare earths. VI. Halides of bivalent europium, I, 381.
- and Hauschulz, *B.*, magnetochemical studies. XXXII. Magnetic measurements on alkali metal amalgams, I, 360.
- and Kilian, *H.*, ammoniates of gallium and indium trifluorides, I, 332.
- and Senff, *H.*, bi- and quadri-valent compounds of the rare earths. VIII. [Sulphide, selenide, and telluride of] bivalent europium, I, 381.
- Sodomann, *H.*, and Langmesser, *P.*, [sulphides, selenides, and tellurides of] the alkali metals, I, 379.
- See also Doll, *W.*, Helms, *A.*, Hoschek, *E.*, Senff, *H.*, Stohr, *H.*, and Tilk, *W.*
- Klemparskaja, *N. N.*, paracrystals of tobacco mosaic virus, III, 947.
- Klemperer, *F. W.* See Greenstein, *J. P.*
- Klemperer, *H.*, spark potential curves of inert gases at low pressures, I, 2.
- Klemperer, *O.*, and Wright, *W. D.*, electron-losses, I, 340.
- Klenk, *E.*, and Clarenz, *L.*, cerebroside. XVI. Cerebronic acid, II, 138.
- and Goebel, *A.*, cerebroside storage in liver and spleen, III, 172.
- and Sakai, *R.*, phosphatides. XIV. Inositolmonophosphoric acid from the phosphatide of soya bean, II, 158.
- Kleschtchov, *S.*, demarcation of the conditioned food and protective reflexes, III, 572. Attempt to cure neurosis by external inhibition, III, 750.
- Kletseha, *J.* See Behounek, *F.*
- Kleu, *H.* See Rheinboldt, *H.*
- Klewan, *G.* See Josephson, *E. M.*
- Klien, *B. A.*, case of so-called Oguchi's disease in U.S.A., III, 1042.
- Klienenberger, *E.* See Findlay, *G. M.*
- Kliever, *W. H.*, intensities of the *K*-series of X-ray lines of tungsten and platinum, I, 589.
- Kliewe, *H.*, and Haas, *W.*, artificial fertilisers and secondary infection, III, 337.
- Kligman, *M. I.* See Mereshinski, *M. F.*
- Klijnhout, *A. E.*, triangular structure for isatin, II, 36.
- Klima, *R.*, advances in therapy of blood diseases, III, 229.
- See also Bodart, *F.*
- Klimenko, *J. V.* See Sirokomski, *V. S.*
- Klimmer, *O.* See Neumann, *Wilhelm.*
- Klinck, *F.* See Freudenberg, *K.*
- Kline, *B. E.* See Baumann, *C. A.*, and Rusch, *H. P.*
- Kline, *B. S.*, and Lloyd, *D. K.*, rapid heating of serum for slide tests for syphilis, III, 631.
- Kline, *C. L.* See Davenport, *H. A.*
- Kline, *E. M.*, Conn, *J. W.*, and Rosenbaum, *F. F.*, supernormal phase in auriculo-ventricular conduction, III, 820.
- See also Curtis, *A. C.*
- Kline, *O. L.*, Tolle, *C. D.*, and Nelson, *E. M.*, basal diets for vitamin-*B*₁ determination, III, 287.
- Kline, *R. F.* See Britton, *S. W.*

- Kling, A., principal factors in pollution of town air, III, 94.
- De Fonbrune, P., and Raynal, F., mechanism of action of dichloroethyl sulphide (yperite) on living cells, III, 934.
- Kling, D. H., significance of peripheral circulatory disturbances for development of osteo-arthritis, III, 746.
- Sashin, D., and Spanbock, J., mechanism of gold therapy in rheumatoid arthritis, III, 1089.
- Klingensmith, L. E. See Ravdin, I. S.
- Klinger, H. See Redlich, O.
- Klinghoffer, K. A., effect of iodoacetic acid on intestinal absorption of monosaccharides and sodium chloride, III, 80.
- Klingman, W. O., treatment of neurogenic megacolon with selective drugs, III, 182. See also Day, R.
- Klingmüller, V. See Krusk, K.
- Klinke, J., use of freezing with extreme temperatures in experimental cancer research, III, 848.
- Klinzing, A., action of vitamin-A and detoxin on diphtheria bacillus carriers, III, 1068.
- Kljatschkin, L. N., influence of ultra-violet rays on the structure of cell protoplasm, III, 1007.
- Klobucar, F. See McCullagh, D. R.
- Klobusitzky, D. von, chemistry of animal poisons, III, 696.
- and König, P., venom of the genus *Bothrops*. VI., III, 938.
- Klodt, W., and Stieb, B., does pyrophosphate inhibit oxidation of vitamin-C? III, 851. Influence of ethyl alcohol, glucose, and sucrose on the stability of vitamin-C, III, 936.
- Klodwig, U. See Thiele, W.
- Klopp, A. H., and Wright, G. F., action of cyanogen bromide on furan, II, 383.
- Klor, G., treatment of mushroom poisoning, III, 779.
- Klose, A. A., and Almquist, H. J., pigment of egg-shell membranes, III, 69. Use of phosphotungstic acid in preliminary refining of extracts containing vitamin-K, III, 498.
- See also Almquist, H. J., and Asmundson, V. S.
- Kłosówna, S. See Jerzmanowska, Z.
- Klotschko, M. A., physico-chemical analysis of non-aqueous solutions. IV., I, 364. Electroconductivity and viscosity diagrams and temperature coefficient curves of these properties for binary systems of components forming chemical compounds, I, 364.
- and Tshanukvadze, O. P., physico-chemical analysis of non-aqueous solutions. III., I, 364.
- Klotz, I. W. See Mueller, J. Howard.
- Klotz, I. M., equivalent conductances of europium chloride and nitrate, I, 82.
- Klotz, J., Roth, G. B., and Lyon, W. A., idiosyncrasy to paraldehyde, III, 88.
- Klotz, M., parenteral treatment of osteomalacia and rickets with vitamin-D, III, 996.
- Klotz, R., assay of vasomotor substances, III, 561.
- Klug, H. P., and Heisig, G. B., crystal structure of synthetic antimony trisulphide, I, 457.
- See also Lauer, W. M.
- Kluge, W., behaviour of composite photocathodes of potassium, rubidium, and caesium in the ultra-violet, I, 126.
- Klusakova, M. See Hercik, F.
- Kluth, H. J., action of vitamin-A in diseases of the stomach, III, 163.
- Kluyver, A. J., and Molt, E. L., production of acetyl-methylcarbinol by *B. coli*, III, 525.
- Klyne, W., and Robinson, (Sir) R., derivatives of phenalene, II, 72.
- Kmiecik, T. C. See Friedemann, T. E.
- Knackstedt, W. See Hilpert, R. S.
- Knaggs, I. E., and Lonsdale, K., structure of benzil, I, 458.
- Knandel, H. C. See Murphy, R. R.
- Knapp, A. W., and Hearne, J. F., presence of leuco-anthocyanins in Criollo cacao, III, 952.
- Knapp, B. See Baukloh, W.
- Knapp, E. M., spectrographic observations on urinary porphyrins: nature of combined form of coproporphyrin in urine. III, 761.
- Knappsberg, L. See Kauko, Y.
- Knauer, H., importance of the skin in defence against infectious diseases, III, 67.
- Knauf, A. E. See Hann, R. M.
- Knaus, H., periodicity of the menstrual cycle, III, 144.
- Knauss, H. P. See Paul, F. W.
- Knebel, R. See Wezler, K.
- Knepper, W. See Schenck, R.
- Kneser, H. O., acoustic relaxation phenomena, I, 132.
- Kniaginitschev, M. I., separation of membranes of starch grains in various crops, III, 950.
- and Palilova, J. K., *Triticum durum* and *T. vulgare* distinguished by their protein properties, III, 638.
- Kniepkamp, H., characteristic lines of the low-voltage arc in argon, I, 502.
- Knierer, W., biological data curves during deep X-ray therapy, III, 784.
- Knight, A. A., and David, V. C., treatment of venereal lymphogranuloma with sulph-anilamide, III, 610.
- Knight, B. C. J. G. See McIlwain, H.
- Knight, C. A., Dutcher, R. A., and Guer-rant, N. B., determination of vitamin-C in milk, III, 496.
- Knight, E. C. See Johnson, E. M.
- Knipp, J. K., polarisabilities and van der Waals forces for atoms in S states, I, 447.
- See also Breit, G.
- Knippenberg, E. See Rauterberg, E.
- Knipping, H. W., results of clinical ergography, III, 94. Tables showing deficiencies at rest and after effort in various pulmonary, cardiac, and circulatory disturbances, III, 563.
- Knischenko, P. G. See Goldstein, B.
- Knisely, M. H., improved fused quartz living tissue illuminator, III, 445.
- Knisely, M. J., identification of *Treponema pallidum*, III, 1099.
- Knobloch, H. See Bernhauer, K.
- Knoefel, P. K. See Bryant, G. W., and Lehmann, G.
- Knoll, H., Liesegang rings of uric acid, I, 78. Capillary systems with gas-liquid boundary, I, 140. Testing bacterial filters, III, 797. Pore diameter, structure, and qualities of quinhvdrone-collodion membranes, III, 880.
- Knoevenagel, C. See Freudenberg, K.
- Knoll, A. See Leaf, C. W., and Matthews, F. L.
- Knoll, H., and Märki, H., blood trans-fusion in war time, III, 1028.
- Knoll, W., adaptation in sport, III, 781.
- Knoop, C. E., Krauss, W. E., and Hayden, C. C., magnesium and vitamin-D relationship in calves fed mineralised milk, III, 923.
- See also Krauss, W. E.
- Knoop, F., rôle of citric acid in animal metabolism, III, 609.
- and Martius, C., new synthesis of octopine and its relationship to re-amination, II, 248.
- Knopf, B. W. See Greenberg, D. M.
- Knorr, H. V. See Albers, V. M.
- Knospe, H., parathyroid insufficiency, III, 680.
- Knott, E. M. See Schlutz, F. W.
- Knott, H. See Weiser, R. S.
- Knowlton, J. W., and Rossini, F. D., heats of combustion of tetramethyl-methane and β -methylbutane, I, 420.
- Knowlton, K. See Peacock, S.
- Knox, R., neutralisation of "purified" tumour agent suspensions by anti-fowl serum, III, 1063.
- Knox, R. G., place of minerals in swine nutrition, III, 849.
- Knudsen, V. O. See Jones, I. H.
- Knudson, A., Sturges, S., and Bryan, W. R., cholesterol content of skin, blood, and tumour tissue in rats irradiated with ultra-violet light, III, 783.
- See also Sturges, S.
- Knüchel, F., serum-cholesterol in rheu-matic disease, III, 13.
- and Lemmerz, A. H., vitamin-B₁ metabolism, III, 702.
- Knunianz, I. L., and Razvadovskaja, L. V., thio-acyl derivatives of primary amines (synthesis of acyclic carbo-cyanine dyes), II, 414.
- Knutti, R. E. See Rickson, O. C.
- Kny-Jones, F. G., electrolytic deter-mination and separation of bismuth. I. Determination and separation in chloride solution. II. Determinations in sulphuric and nitric acid solutions, I, 279, 579.
- Kobayashi, Masahisa. See Tsuchida, R.
- Kobayashi, Minoru. See Tomonaga, S.
- Kobayashi, R. See Katsura, S.
- Kobayashi, Tadashi. See Kanamaru, K.
- Kobayashi, Teinosuke, synthetic experi-ments concerning eserine. VI. Con-stitution of methyleserethole. II, II, 456.
- Kobayashi, Y., selective solvation of lithium chloride in mixed solvents. II, I, 262. Apparent ionic volumes in aqueous solutions and electrostriction by ionic fields, I, 605. Solution theory applied to zinc sulphate solutions. I. Activity coefficients in isodielectric media, I, 611.
- Taka, K., and Miura, M., selective solvation of lithium chloride in mixed solvents. I, I, 262.
- Kobayasi. See under Kobayashi.
- Kobe, K. A., demonstration of an inverted solubility curve, I, 466.
- Kobeko, P. P., Koton, M. M., and Florinski, F. S., preparation of acrylic acid esters, II, 404.
- Kuvschinski, E., and Schischkin, N., amorphous state. XIII. Viscosity, electrical conductivity, and dielectric losses in alcohols and glycerol, I, 312.
- Kobelev, V. A. See Voroshnev, N. N., jun.

- Kobosev, *N. I.*, formation of catalytically active "ensembles" on surfaces. I, 1, 271.
- and Klatashko-Gurvitsch, *L. L.*, formation of catalytically active "ensembles" on surfaces. II. Application of theory to synthesis of ammonia and to catalytic and electrocatalytic hydrogenation of the ethylene bond, I, 572.
- See also Bessalov, *P.*, Erofeev, *B. V.*, Konovalova, *B. A.*, and Monblanova, *V. V.*
- Kobozieff, *N.*, and Pombriaskinsky-Kobozieff, *N. A.*, fecundity in the mouse, III, 478. Genetic constitution of short-tailed mice of stock I, III, 544.
- Kobren, *A.*, Fellers, *C. R.*, and Esselen, *W. B.*, jun., effect of pectin supplements on avitaminosis-A in rats, III, 1068.
- Koch, *C.*, Schreiber, *B.*, and Schreiber, *G.*, tissue implants in the eye of the guinea-pig. I. Implants of epithelial tissue in the anterior chamber. II. Behaviour of connective tissue in implants in the anterior chamber. III. Paired implants of endocrine organs in the anterior chamber. IV. Tissue implants in the posterior chamber, III, 36.
- Koch, *E.*, metastases of transplanted tumours, III, 847.
- Koch, *F.*, alkalinity of human skin, III, 154. Determination of alkali-neutralising power of skin, III, 844.
- Koch, *F. C.* See Blanch, *M. B.*, and Hoskins, *W. H.*
- Koch, *F. E.*, production of inflammation and necrosis by *Viscum album*, III, 92.
- Koch, *F. L. P.*, and Gowen, *J. W.*, spontaneous ophthalmic mutation in laboratory mouse, III, 971.
- and Prangen, *A. de H.*, marked anisometropia, III, 904.
- Koch, *H.*, migration of basophil cells into the posterior pituitary in aortic incompetence, III, 137. Prolonged treatment of pernicious anaemia, III, 958.
- Koch, *Herbert*, and Steinbrink, *H.*, stereoisomeric hexaethylcyclohexanes, II, 12.
- Koch, *J.* See Bjerge, *T.*
- Koch, *K.* See Westphal, *K.*
- Koch, *K. G.*, treatment of severe carbon monoxide poisoning with blood transfusion, III, 230.
- Koch, *Richard*. See Mamoli, *L.*
- Koch, *W.*, migmatites from the Thuringian Forest, I, 588.
- Koch, *Walter*, effect of testicular hormone on fertilising power of sperm, III, 267. Prolan in oil in veterinary practice, III, 576.
- Koch, *Willy*, and Winterhager, *H.*, solubility of chromium in aluminium, I, 18.
- Koch, *W. E.*, jun., intra-oral radiography of living dogs, III, 193.
- Kochakian, *O. D.*, excretion and fate of androgens. I. and II., III, 53, 482.
- Kochańska, *L.* See Bobranski, *R.*
- Kochi, *M.* See Hasegawa, *S.*
- Kocholaty, *W.* See Weil, *L.*
- Kocem, *E. J.*, and Ivy, *A. C.*, effect of foods on bile volume output in the dog, III, 150.
- Kocsis, *E. A.*, detection of iron and uranium by means of drop reactions, I, 219. Hydrolytic volumetric analysis by precipitation. II. Determination of barium, I, 337. Drop tests for ions, I, 534.
- Koczy, *F.* See Pettersson, *H.*
- Kodama, *K.* See Sugawara, *S.*
- Kodama, *S.*, conductivity of perfusion fluid of frog's heart under abnormal atmospheric pressure, III, 654.
- Kodama, *T.*, and Kojima, *T.*, studies of staphylococcal toxin, toxoid, and anti-toxin. II. Properties of α 2 and β haemolysin. III. Effect of ascorbic acid on staphylococcal lysins and organisms, III, 630.
- Ozaki, *M.*, Nishiyama, *S.*, Igarasi, *J.*, Tiku, *Y.*, and Kawamura, *H.*, serological grouping and typing of hæmolytic streptococci isolated in Tokyo. III, 795.
- Kodera, *K.*, chemical studies by means of molecular beams. VII. Measurement of atomic beams of potassium by means of an incandescent tungsten surface. I. VIII. Measuring the intensity of potassium atomic beams with an incandescent tungsten surface, I, 395, 433.
- Koebner, *A.*, and Robinson, (*Sir*) *R.*, experiments on synthesis of substances related to the sterols. XXII. Synthesis of α -norequinin methyl ether, II, 75.
- Köbner, *G.* See Edlbacher, *S.*
- Köcher, *A.* See Biltz, *W.*
- Kögl, *F.*, tumour aetiology, III, 848.
- and Erxleben, *H.*, chemistry of tumours. I. Aetiology of malignant tumours, III, 489.
- Köhler, *A.* See Haberlandt, *H.*
- Köhler, *H. J.*, effect of veritol on blood pressure and pulse rate in healthy people and in those with surgical diseases, III, 612.
- Koehler, *O.*, coupling and exchange of gene factors in man, III, 643.
- Köhler, *P.*, isotope displacement in the Tl α spectrum, I, 543.
- Koehne, *M.* See Jay, *P.*
- Köllensperger, *F. K.*, action of bile salts and cholesterol on central nervous system, III, 748.
- Koelsch, *C. F.*, action of benzene and aluminium chloride on 2:3-diphenylindone, II, 117. Preparation of *m*-bromophenol, II, 258.
- and Hochman, *H.*, enolisation of 1:2-diketohydrindene and of 1:2-diketo-3-phenylhydrindene, II, 119.
- and Richter, *H. J.*, anomalies encountered in synthesis of tetraphenylfulgenic anhydride, II, 113. Action of aluminium chloride on phenylated fulgenic anhydrides, II, 117.
- and Rosenwald, *R. H.*, perinaphthindene series. III. Action of magnesium phenylbromide on 7-ethoxyperinaphthinden-9-one, II, 118.
- See also Geissman, *T. A.*
- Koenen, *O.*, family history of hæmolytic jaundice, III, 389.
- König, *C.*, effect of the shutter on absolute determination of the r unit, I, 115.
- König, *E.* See Ley, *H.*
- König, *H.* (Eidgen), differential pre-amplifier for electro-physiological purposes and for bridge measurements, I, 44. Properties of a selenium barrier-layer [photo]-cell with the "ballistic" method of measurement, I, 221. Application of the filter method in objective heterochromatic photometry, I, 626.
- Koenig, *H.* (Zürich). See Karrer, *P.*
- König, *O.* See Rheinboldt, *H.*
- König, *P.* See Klobusitzky, *D. von*.
- König, *W.*, treatment of painful scars, III, 315. Specificity of prontosil in erysipelas, III, 710.
- Koenig, *Werner*. See Ehrhardt, *K.*
- Koeniger, *W.* See Auler, *H.*
- Königs, *G.* See Schlomka, *G.*
- Koenigsberger, *J.*, magnetic susceptibility of Central Swiss rocks and area susceptibilities of the Alpine tracts from Flüelen to Bellinzona, I, 584.
- Königstein, *H.*, central localisation of scratch reflex elicited by morphine, III, 750.
- Königstein, *R.* See Deutschberger, *O.*
- Koepke, *K.*, treatment of hypertension. III, 561.
- Koerber, *W.* See Berl, *E.*
- Koerker, *F. W.*, and Calderwood, *H. N.*, system ferric oxide-sulphur trioxide-water, I, 81.
- Koern, *V.*, binary alloy system Ag-Tc, I, 517.
- Körner, *F.*, non-nucleated red blood cells in urodeles, III, 5. Muscle of diaphragm, III, 641.
- Körösy, *F.*, tantalum iodides, I, 36.
- Köster, *E.*, and Mulfinger, *W.*, systems of cobalt with boron, arsenic, zirconium, niobium, and tantalum, I, 18.
- Köster, *H.* See Inhoffen, *H. H.*
- Köster, *W.*, and Bechthold, *W.*, system manganese-aluminium, I, 18.
- and Becker, *G.*, system iron-cobalt-tantalum, I, 518.
- and Gebhardt, *E.*, system cobalt-manganese-aluminium, I, 19. Magnetic properties of cobalt-manganese-aluminium alloys, I, 20. System nickel-manganese-aluminium, I, 20.
- and Kam, *K.*, Mg-MgZn₂-Mg₂Tl₂ region of the magnesium-zinc-thallium system, I, 413. Magnesium corner of the magnesium-silver-thallium system, I, 413.
- and Lang, *Karl*, cobalt corner of the iron-cobalt-vanadium system, I, 19.
- and Wagner, *E.*, ternary system cobalt-manganese-copper, I, 19. Mg-Al₂Mg₄-Mg₂Tl₂ portion of the ternary magnesium-aluminium-thallium system, I, 19. Mg-MgCd₂-Mg₂Tl₂ portion of the ternary magnesium-cadmium-thallium system, I, 19.
- Köthnig, *M.* See Brederick, *H.*
- Kovári, *F.* See Kolonits, *B.*
- Köf, *A. K.* See Davis, *M. E.*
- Kofter, *A.*, ergot alkaloids. V. Ergometrine, ergometrinine, ψ -ergotinine, ergocristine, and ergocristinine, II, 130. Detection of ergotamine and ergotaminine in gynergen, II, 464.
- Kofter, *L.*, physical methods in the chemical laboratory. XXXVIII. Microscopic method of identifying organic substances, II, 43.
- Kofman, *T.*, action of visible and ultra-violet light on periodic reactions, I, 272.
- Koga, *I.*, and Tatibana, *M.*, extremely bright spots on a Coolidge tube target, I, 590.
- Kogan, *I. M.*, and Ganina, *T. N.*, condensation of phthalic anhydride with *p*-dichlorobenzene, II, 28.
- Kogan-Jasni, *V. M.*, circulation and endocrines, III, 453.
- Kohanenko, *P. N.*, mechanism of catalytic reactions. I. Luminescence of phosphorescent substances in acetone decomposition, I, 207.
- Kohbrok, *H. J.*, treatment of paroxysmal tachycardia, III, 456.
- Kohl, *H.*, histidine, ascorbic acid, and calcium in bleeding, III, 117.

- Kchl, M. F. F., balance sheet of fat absorption. I. Storage of elaidic acid by the rat over a one-day period. II. Storage of elaidic acid by the rat over periods of several days. III. Disappearance of elaidic acid from tissues of the rat, III, 297.
- Kohlbach, D. See Prelog, V.
- Kohler, D. See Bariéty, M., and Troisier, J.
- Kohler, E. P., and Sonnichsen, H. M., influence of α -halogen substitution on enolisation of ketones, II, 24.
- Tishler, M., Potter, H., and Thompson, H. T., preparation of cyclic ketones by ring-enlargement, II, 325.
- Kohler, O. O., Elvehjem, C. A., and Hart, E. B., relationship of pyrrole-containing pigments to haemoglobin synthesis, III, 650.
- Randle, S. B., Elvehjem, C. A., and Hart, E. B., simplified rations for guinea-pigs suitable for assay of the grass juice factor, III, 924.
- Kohler, M., magnetic Hall effect of pure metals at low temperatures, I, 65.
See also Justi, E.
- Kohlhaas, R., and Lüttringhaus, A., valency angles. III. Determination by means of X-rays of the binding angle at the sulphur atom in a diphenyl sulphide derivative, I, 306.
- and Soremba, K., structure of crystalline aliphatic compounds; fine structure of *n*-triacontane, $C_{30}H_{62}$, I, 130.
See also Lüttringhaus, A.
- Kohlrusch, K. W. F., Raman effect and organic chemistry, I, 8.
- and Paulsen, O., Raman effect. XCVIII. Poly-substituted benzene. XIII. Analysis of "para" spectra, I, 403.
- and Reitz, A. W., Raman effect. LXXXIX. Ethylene oxide, I, 121.
- and Sabathy, R., Raman effect. XCIII. cycloButane-1:2-dicarboxylic acid and derivatives. XCIX. Esters of mono- and poly-carboxylic acids, I, 121, 450.
- and Seka, R., Raman effect. CV. Nitrogen compounds. XV. Alkylated acid amides, I, 510.
- and Skrabal, R., Raman effect. XCII. Dimer keten, I, 121.
- Kohlschütter, H. W., and Kalippke, E., structural elements of amorphous iron hydroxide, I, 275.
- and Siecke, H., topochemically-prepared ferric hydroxide, I, 211.
- and Sprenger, L., evolution of topochemistry, I, 273.
- Kohlschütter, V., principles of genetic formation of materials. IX. Chemical importance of somatoids, I, 260.
- and Dürrenmatt, K., principles of genetic formation of materials. XI. Material formation in a gaseous medium, I, 370.
- and Eggenberger, H., principles of genetic formation of materials. X. Formation of elements of somatoidal structure in electrolytic deposition of metals, I, 271.
- and Stocker, E., principles of genetic formation of materials. XII. Cathodic deposition of metals in solid electrolytes, I, 479.
- Kohlstaedt, K. G., Helmer, O. M., and Page, I. H., activation of renin by blood colloids, III, 152.
See also Helmer, O. M.
- Kohman, G. T. See Holden, A. N.
- Kohn, H. I., concentration of co-enzyme-like substance in blood following administration of nicotinic acid to normal individuals and pellagrins, III, 199.
- Bernheim, F., and Felsovanyi, A. V., blood V-factor (co-enzyme) level in normal and pathological subjects, III, 1030.
- and Klein, J. R., synthesis of cozymase and factor V from nicotinic acid by human erythrocytes *in vitro* and *in vivo*, III, 994.
- Klein, J. R., and Dann, W. J., V-factor content and oxygen consumption of tissues of the normal and blacktongue dog, III, 994.
- Kohn, J. L., Fischer, A. E., and Resch, H. U., treatment of early measles with parental whole blood, III, 728.
- Klein, I. F., and Schwarz, H., treatment of pro-eruptive measles with convalescent serum, III, 335.
- Kohn, R., barbiturates with reference to individual susceptibility, III, 314.
- Platt, S. S., and Saltman, S. Y., picrotoxin-barbiturato antagonism, III, 315.
- Kohout, M., iodine value of river waters, I, 342.
- Kohut, B. See Jilek, A.
- Koike, K., agonal fall in thrombocytes, III, 9.
- Koikegami, H., nuclei and fibre connexions of the mammillary bodies of mammals, III, 246.
- Koinzer, M. See Hofer, K.
- Koizumi, K. See Aoki, K.
- Koizumi, M., Komaki, Y., and Titani, exchange of hydrogen atoms between pyrrole, indole, and their methyl derivatives, and water. V. Exchange of hydrogen atoms between *N*-methyl-indole and water, II, 35.
- and Titani, T., exchange reaction of the hydrogen atoms of the nucleus in phenol. I. Exchange reaction in alkaline solution, I, 150. Exchange of hydrogen atoms between nitrophenols and water. III. Activation energies, I, 269.
- Kojima, S. See Sagane, R.
- Kojima, T. See Kodama, T.
- Kok, D. J., Harreveld, A. van, and Waterman, L., action of cutaneous anaesthesia on the bulbocapnine catalepsy of cats, III, 187. Bulbocapnine catalepsy in cats, III, 374.
- Kokas, E. von, movement of intestinal villi and resorption of glucose, III, 148.
- and Ludány, G. von, "villikin" and the absorption of glucose from the intestine, III, 148.
- Kokas, F. See Lissák, K.
- Kokubo, Y., blood picture of lactating women, III, 645. How will sexual cycles of healthy women influence blood picture? III, 645. Haemodimentation of healthy lactating women, III, 696.
See also Shindo, M.
- Kolaczowska, M., unit cells of quartz and chalcodony, I, 499. Colour change in barytes under the action of X-rays, I, 530.
See also Przytycki, S. J. von.
- Kolarov, N. See Balarev, D.
- Kolb, J. J., standardisation of sodium thiosulphate by copper using perchloric acid, I, 336.
See also Toennies, G.
- Kolb, L. C. See Langworthy, O. R.
- Koldaev, B. M., and Gelman, R. M., effect of fatiguing work on ascorbic acid content and oxidation-reduction reactions of muscle at various levels of saturation of the organism with vitamin-C, III, 768.
- Koletsky, S., haemolytic anaemia after sulphanilamide, III, 1084.
- and Stecher, R. M., primary systemic amyloidosis; involvement of cardiac valves, joints, and bones with pathological fracture of the femur, III, 500.
- Koletzko, J. See Grunke, W.
- Kolff, W. J., intermittent venous occlusion, III, 823.
- Kolhatkar, G. B., and Bapat, V. V., decomposition of naphthol ethers by halogen acids and by alcoholic caustic potash and determination of the velocity constants, I, 269.
- Kolhorster, W., registration of coupled cosmic rays, I, 493.
- and Matthes, I., detection of mesotrons in cosmic radiation with compensation for air pressure, I, 174.
See also Ertel, H.
- Kolin, A. See Katz, L. N.
- Kolka, A. J., and Vogt, R. R., reactions with boron fluoride. XXII. Methylation of aromatic compounds by methyl ether boron fluoride, II, 365.
- Koll, W., and Koll-Schroder, M., stimulating action of veritol on central nervous system, III, 778.
- and Nocken, H., time relations of administration and action of oestrogenic substances, III, 755.
- and Reffert, H., analgesia in dogs, III, 186. Determination of analgesic actions [of morphine derivatives], III, 932.
- Koll-Schroder, M. See Koll, W.
- Kollath, E. See Kollath, W.
- Kollath, R., secondary electron emission, I, 113.
- Kollath, W., biological action of elements in small quantities, III, 93. Dietary problems, III, 492. Metabolism in rats on a vitamin-deficient diet containing only vitamin-B₁, III, 1070.
- Kollath, E., Giesecke, L., Schraep, M., and Poetschke, G., action of diet before absorption from the intestine, III, 764.
- and Stadler, P., redox potentials and metabolism, III, 404.
- Koller, F., action of concentrated liver extracts, III, 351.
- Koller, K. (Wien). See Kindinger, M.
- Koller, L. R. See Zahl, P. A.
- Kolmer, J. A., guinea-pig serum in relation to prezone and non-specific Wassermann reactions, III, 631. Preserved citrated blood "banks" in relation to transfusion in treatment of disease with special reference to the immunologic aspects, III, 814.
- Brown, Herman, Rule, A. M., and Werner, M. F., toxicity, therapeutic activity, and mode of action of sulphanilamide in experimental streptococcus infections in rabbits, III, 177.
- Mahoney, J. F., and Lynch, E. R., complement-fixation reaction in tuberculosis, III, 431.
- Raiziss, G. W., and Rule, A. M., sulphanilamide and diaminodiphenylsulphone and their diacetyl derivatives in the treatment of experimental intradermal streptococcus infections of rabbits, III, 304.

- Kolmer, J. A., Raiziss, G. W., and Rule, A. M., sulphanilamide and derivatives in the treatment of experimental tuberculosis of guinea-pigs, III, 410. Sulphanilamide and its derivatives in treatment of experimental pneumococcus infections, III, 710.
- and Rule, A. M., sulphanilamide in treatment of experimental trypanosomiasis of rats, III, 857. Sulphanilamide in treatment of experimental *Shigella dysenteriae* (Shiga) infections of rabbits, III, 857. Sulphanilamide and sulphapyridine in experimental *B. typhosus* infections of mice, III, 1081.
- Kolomietz, B. T., thallium sulphide photo-cells with "positive" photo-effects in the blocking layer, I, 404.
- Kolomietz, M. L. See Goldstein, B.
- Kolomitschenko, M. See Borshkovski, S. E.
- Kolonits, B., and Kovári, F., effect of calcium chloride and sodium oxalate on novocaine-adrenaline anaesthesia, III, 615.
- Kolouch, F., jun., origin of bone marrow plasma cell associated with allergic and immune states in the rabbit, III, 3.
- Kolta, E. von, and Irányi, E., treatment of diabetes mellitus by X-irradiation [of the pituitary], III, 975.
- Kolthoff, I. M., and Bendix, G. H., determination of potassium with hexanitrodiphenylamine (dipicrylamine), I, 215.
- and Bushey, A. H., adsorption with a specimen of barium sulphate provided by Mlle. de Brouckère, I, 73.
- and Eggertsen, F. T., ageing and co-precipitation. XXVI. Co-precipitation of silver chloride with colloidal and flocculated silver bromide, I, 365.
- and Fischer, W. von, ageing of precipitates. XXIV. Apparent effect of filtration on the ageing of fresh lead sulphate; ageing of lead sulphate in excess of lead and of sulphate. XXV. Speed of solution of lead sulphate as an indication of the progress of ageing, I, 150.
- and Guss, L. S., acid-base indicators in methyl alcohol. II. Dissociation of triphenylcarbinols in methyl alcohol. III. Concentration ionisation constants of indicators and acids in methyl alcohol, I, 144, 200.
- and Halversen, R. A., ageing and co-precipitation. XXVII. Co-precipitation of nitrate with lead sulphate and the decomposition of co-precipitated nitrate on heating, I, 381.
- and Laitinen, H. A., standardisation of strong oxidising agents with potassium iodide by the acetone method, I, 489.
- and O'Brien, A. S., ageing and formation of precipitates. XXIX. Thermal ageing and abnormal physical properties of fresh silver bromide, I, 466.
- and Overholser, L. G., ageing and co-precipitation. XXVIII. Adsorption of bivalent ions on and co-precipitation with orthoferriic hydroxide in ammoniacal medium. XXIX. Ageing of ortho-ferric hydroxide in the absence and presence of bivalent ions in ammoniacal medium, I, 415, 607.
- See also Laitinen, H. A., Lingane, J. J., and Sandell, E. B.
- Komaki, Y. See Koizumi, M.
- Komar, A., and Sidorov, S., Hall effect in an AuCu₃ alloy in and out of the orderly condition, I, 459.
- See also Buinov, N.
- Komar, E. P. See Kozakevitch, P. P.
- Komárek, K., reaction of zinc, I, 98. Acidimetric determination of aluminium, I, 489.
- Komarewsky, V. I., and Riesz, C. H., aromatisation of *n*-octane and *n*-decane in the presence of nickel-alumina catalyst, II, 491.
- Riesz, C. H., and Thodos, G., aromatisation of fatty alcohols, II, 491.
- Komisiike, M. See Takasima, R.
- Komissarov, D. A., effect of growth-substances on rooting response of cuttings from pine and other woody species, III, 732.
- Komlós, E. See Simon, Alexander.
- Komori, K. See Ito, Takeo.
- Komori, S., preparation of unsaturated higher alcohols. II. and III, II, 355, 491.
- Komppa, G., and Beekmann, S., fenchene series. IX. Stereoisomeric *dl*- β -fenchocamphorols, II, 121.
- Klami, A., and Kuvaia, A. M., total synthesis of pinene, II, 271.
- and Nyman, G. A., 1-methylsantene oxide and methylsantene glycol, II, 121.
- Kon, G. A. R., and Soper, H. R., syntheses of polycyclic compounds related to the sterols. VII. Cyclisation of γ -5-methoxy-1-naphthylbutyric acid, II, 326.
- Soper, H. R., and Woolman, A. M., smilagenone: a correction, II, 436.
- and Weller, W. T., condensation of 2-methylnaphthalene and acetyl chloride, II, 324. Sapogenins. IV. Sapogenin of *Balanites aegyptica*, Wall., II, 332.
- and Woolman, A. M., sapogenins. III. Dehydrogenation products of methylsarsasapogenin and methylcholestanol, II, 332.
- See also Elliott, D. F., and Heywood, B. J.
- Kon, S. K., and Maddock, C., effect of vitamin-A deficiency on resistance of pigs to tuberculosis infection from naturally infected milk, III, 285.
- See also Foot, A. S., Henry, K. M., and Houston, J.
- Kon, T. See Ogata, A.
- Kondi, A. See Foy, H.
- Kondo, H., and Keimatsu, I., *Sinomenium* and *Cocculus* alkaloids. XLVIII. Constitution of cepharanthine, II, 93.
- and Ono, Seturo, constituents of "senso." VI. [Active constituents of the native toad, *Bufo vulgaris formosus*.] VII. New constituent of native toad poison: *F*₃-bufotalin. VIII. Ozonisation of acetyl- β -deacetylbufotalin. IX. Cinobufotalin, a substance accompanying cinobufagin, II, 382, 438.
- Tomita, M., Satomi, M., and Ikeda, T., *Sinomenium* and *Cocculus* alkaloids. XLIX. Alkaloids of *Stephania cepharantha*, Hayata. VI. Systematic method of separation of the alkaloids, II, 459.
- Kondrateev, V., absorption spectrum and life-time of the carbon sulphide radical, I, 177. Spectroscopy of hydroxyl, I, 240. Mechanism of recombination of the hydroxyl radical in the electric discharge through water vapour, I, 619.
- See also Kondrateeva, E.
- Kondrateeva, E., and Kondrateev, V., carbon monoxide-oxygen flame. V. Influence of temperature on the yield of visible light of a flame of 2CO+O₂. VI. Photochemical oxidation of CO near the region of self-inflammation, I, 569, 619.
- Konek, F. von, methiodides of quinidine and hydroquinidine, II, 457.
- Konheim, W. See Buschke, A.
- Konigsberg, M. See Wolfstrom, M. L.
- Konikov, A. P., koto-enol tautomerism of proteins. I. Tautomerism of gelatin: potentiometric titration data, II, 526.
- and Genin, I. L., antigenic properties of products of alkaline hydrolysis of egg-albumin and their nitrogen derivatives, III, 797.
- and Nazarova, L. M., koto-enol tautomerism of proteins. II. Tautomerism of peptides and diketopiperazines, II, 526.
- Konishi, K., Tsuge, T., and Kawamura, A., effects of minerals on growth of root nodule bacteria. I. and II., III, 523, 628.
- Koniuszy, F. See Folkers, K.
- Konnertz, F. See Clusius, K.
- Konomi, T., effect of hexokinase on the mitogenic ray due to blood glycolysis, III, 96.
- Konovalov, P. F. See Toropov, N. A.
- Konovalova, B. A., and Kobosev, N. I., volume and surface processes during the oxidation of nitrogen in a glow discharge. I. and II., I, 480, 573, 619.
- Konovalova, R. A., Junoussov, S., and Orékhov, A. P., alkaloids of *Papaver* types. III. Alkaloids of *Roemeria refracta*, D.C., II, 290. Alkaloids of *Roemeria refracta*, D.C. III. Alkaloids of plants of the *Papaveraceae* family, II, 565.
- See also Rabinovitch, M. S.
- Konovaltchik, A. I. See Scherlin, S. M.
- Konstam, G. L. S., and Wood, F. G., kymography in Pick's disease, III, 557.
- Konstantinova-Schlesinger, M., influence of *p*_H of the solution on fluorescence spectrum of a solute, I, 69. Technique of fluorescence analysis; quantitative fluorescence analysis and cases of its application, I, 94.
- Kontio, P., portable electrode for *p*_H measurements, I, 104.
- Konuchevska, H. See Jatsenko-Chmelevski, A.
- Konz, W. See Wieland, H.
- Konzelmann, F. W. See Tyson, R. M.
- Konzett, H., action of sympathomimetic drugs on fall of blood pressure produced by quinine, III, 308.
- and Weis, W., formation of adrenaline from sympathol by irradiation with ultra-violet light, III, 377.
- Kool, C. M. H. See Backer, H. J.
- Koolhaas, D. C. See Meijer, T.
- Koolhaas, D. R. See Holleman, L. W. J., and Meyer, T. M.
- Koonz, C. H., and Ramsbottom, J. M., histological structure of frozen products. I. Poultry, III, 1024.
- Koopmans, S., function of the blood vessels in the brain; effect of sympathetic and vagal fibres of the neck, III, 19.
- Kooser, J. H., and Blankenhorn, M. A., pellagra of Kentucky mountain folk, III, 767.
- Koot, I. van, purification of the tobacco mosaic virus, III, 1106.

- Kopaczewska, I., and Kopaczewski, M. W., coagulation of serum by caustic soda, III, 555.
- Kopaczewski, M. W. See Kopaczewska, I.
- Kopaczewski, W., composition, physical characters, and physiological role of sweat, III, 597. Phenomenon of shock, III, 866.
- Kopeć, S., sexual differences of growth-rate of mature mice based on daily variations in weight, III, 61. Effect of temporary famine on growth of larvae of *Lymantria dispar*, III, 282. Control of growth in old mice, III, 282.
- Koperina, A. V. See Gavrilov, N. I.
- Kopetzky, S. J., management and treatment of otogenic meningitis, III, 177.
- Kopniak, Z. See Kemula, W.
- Koppányi, T., action of toxic doses of atropine on central nervous system, III, 935.
- See also Cutting, R. A., Herwick, R. P., and Linegar, C. R.
- Koppelman, S., effects of large doses of insulin on blood hydration in man, III, 582.
- Koppenhoefer, R. M., lipins of sheep skins. II. Effects of pullery processes on the lipins, III, 696.
- Koppius, O. G. See Duffendack, O. S.
- Koprowski, H., and Uninski, H., ammonia content of canine blood after oral administration of ammonium salts and ammonia, III, 709.
- Korányi, A., and Szenies, T., callicrein in [saliva and] gastric juice, III, 689.
- See also Kylin, E.
- Korb, H., comparison of temperature measurements in man treated with λ of 6 and 1 m., III, 868.
- Korchin, B. See Winsor, A. L.
- Kordes, E., calculation of effective ionic radii from mol. refraction of ions, I, 128. Fine structure of glasses. I. Molecular refraction of binary phosphate-, silicate-, and borate-glasses. II. III. Binary and pseudo-binary glasses with insignificant packing effects, I, 250, 412, 464. Ionic radius and the periodic system, I, 400. Molecular refraction of glasses, I, 412.
- Koref, O., Lipschütz, A., and Vargas, L., *jun.*, sexual specificity and tumour formation; [action of oestradiol], III, 586.
- See also Lipschütz, A.
- Korenchevsky, V., Burbank, R., and Hall, K., action of dipropionate and benzoate-butyrate of oestradiol on ovariectomised rats, III, 585. Effects of prolonged administration of sex hormones to female rats, III, 590.
- and Hall, K., manifold effects of male and female sex hormones in both sexes, III, 145. Prolonged sex hormone injections into rats, III, 384.
- Hall, K., Burbank, R., and Ross, A., manifold activity of testosterone dipropionate in gonadectomised rats; comparison with the monopropionate, III, 267.
- Hall, K., and Ross, M. A., prolonged administration of sex hormones to castrated rats, III, 482.
- See also Copping, A. M.
- Korenjako, A. I., biological method of distinguishing microbacteria, III, 947.
- Korenman, I. M., detection of nickel in very dilute solutions, I, 41. Microchemical detection of mercury, I, 535.
- Korf, D. M., and Zacharova, N. A., viscosity of liquid phase of frozen solutions of the sea-water type, I, 411.
- Korff, S. A., theory of effect of earth's magnetic field on cosmic rays, I, 116.
- and Clarke, E. T., upward radiation produced by cosmic rays at high altitudes, I, 593.
- and Danforth, W. B., neutron measurements with boron trifluoride counters, I, 396. Correlation of counter and electroscope measurements of cosmic radiation in the stratosphere, I, 506.
- Korinek, and Babička, J., polarographic analysis of bacterial extracts, III, 337.
- Kork, H. C. See Scheer, W. M. van der.
- Korkisch, F. See Hecht, F.
- Kornblith, B. A., Jacoby, A., and Wishengrad, M., treatment of chancroid with sulphamylamide, III, 304.
- Kornblum, N. See Renshaw, R. R.
- Korneieva, A. V. See Poljakov, M. V.
- Kornerup, T. G. See Ahlmark, A.
- Kornfeld, G., crystal nuclei, I, 243. Absolute values of velocity constants in formation of semiquinone, I, 327.
- and Weissberger, A., mechanism of autoxidation of ψ -cumoquinol, II, 153.
- Kornienko, D. A., saccharolactone, II, 357.
- Kornilov, I. I., correlation between time of transformation and chemical composition of a system approaching equilibrium, I, 251. Conversion velocity of supersaturated solid solutions of magnesium-aluminium, I, 412.
- Koramüller, A. E., clinical application of the electro-encephalogram, III, 129.
- Korobotschkina, T. V. See Feigelson, I. B.
- Korobov, N. N., determination of tungsten, I, 625.
- Korolev, F. A., application of Toppler's method to the measurement of supersonic absorption in air, I, 188.
- Korotkin, I. I. See Ptschelin, V. A.
- Korr, I. M., osmotic function of the chicken kidney, III, 595.
- See also Harvey, E. N.
- Korschak, V. V., action of hexachloroethane on Grignard reagents, II, 530.
- and Lisseenko, A. F., action of sulphur monochloride on phenylacetone, II, 546.
- Korsching, H., and Wirtz, K., separation of liquid mixtures by combined thermo-diffusion and thermo-siphon action, I, 282. Separation of liquid mixtures in the Clusius separation tube; (separation of zinc isotopes), I, 483.
- See also Schüler, H.
- Korschunov, I. A. See Kapustinski, A. F.
- Korte, R. See Palomaa, M. H.
- Korteweg, R., and Thomas, F., tumour induction and tumour growth in hypophysectomised mice, III, 1063.
- Korth, See Vonkennel.
- Korth, C., limits of clinical electrocardiography, III, 17.
- See also Dunis, E., and Spang, K.
- Kortschagin, L. V., and Piontkovskaja, M. A., absorption spectrum of heavy acetone in solution in hexane, I, 595.
- See also Brodski, A. E.
- Kortschak, H. P., citrates and viscosity of pectin solutions, I, 258. Electrolytes and viscosity of pectin solutions, I, 563.
- Kortüm, G., arrangement of electron bands in the spectra of solutions. I. Light absorption of aromatic nitro-compounds. II. Absorption of aliphatic nitro-compounds and oximes. III. Light absorption of nitrous and nitric acids, and their salts and esters, I, 178, 449, 508.
- Korzybski, T., and Parnas, J. K., exchange *in vivo* of phosphorus atoms in adenosine-triphosphoric acid, III, 856.
- Kosaka, G., biological action of magnesium. I. Mechanism of corrosion of magnesium and its alloys, III, 501. Histopathological changes in tissues after implantation of magnesium or other light metals, III, 715. Treatment of angiomata by magnesium, III, 716.
- Koschara, W., virus investigations, III, 723.
- and Haug, H., physiological significance of uropterin, III, 762.
- and Hrubesch, A., excretion of uropterin by man in health and disease, III, 694.
- Koscheleva, N. F. See Uschakov, M. I.
- Koschkin, N. V., action of cupric and cuprous chloride and sodium on thiocarbonyl, II, 256.
- Koshuchova, M. A. See Plaksin, I. N.
- Kosiakova, A. V., and Panferov, J. K., blood-sugar curves in children with croupous pneumonia, III, 233.
- Kosonogova, K. M., photo-electrochemical phenomena, I, 209.
- Kossel, W., regions of building up or breaking down processes on the crystal sphere, I, 64.
- Kossowitch, N., modification in antigenic properties of bacteria as a function of their state of dissociation, III, 431.
- Koster, H., Shapiro, A., and Liekensohn, A., concentration of procaine in the cerebrospinal fluid of the human being after subarachnoid injection, III, 315.
- Shapiro, A., and Warshaw, R., concentration of procaine in cerebrospinal fluid of the human being after subarachnoid injection, III, 933.
- Koster, L., presence of glycerophosphatase in human faeces, III, 1058.
- Kosterina, J. N. See Epshtein, D. A.
- Kosterlitz, H. W., synthetic galactose 1-phosphate, II, 407.
- See also Bacon, J. S. D.
- Kosternaja, A. F., application of Tschugaev's xanthate method of preparing unsaturated hydrocarbons to dihydric alcohols, II, 199.
- Kostileva, E., chemical composition of zircons, I, 499.
- Kostitzin, V. A. See Volterra, V.
- Kostitzine, J., phagocytosis of unused spermatozooids in the purple-fish, III, 757.
- Kostov, D., differentiation of heterochromatic regions during meiosis, III, 108. Abnormal meiotic processes induced by acenaphthene, III, 103. Chromosome structure and behaviour, III, 225. Directed hereditary variations conditioned by euploid chromosome alterations in higher plants, III, 340. Chromosome duplication and polyploid chromosome chimeras due to acenaphthene and colchicine, III, 437. Colchicine and acenaphthene as polyploidising agents, III, 445. Nicotine and citric acid content in progeny of the allopolyploid hybrid *Nicotiana rustica*, L. \times *N. glauca*, Grah., III, 538.

- Kostov, D., abnormal mitosis in tobacco plants forming hereditary tumours, III, 1111. Effect of the fungicide "granosan" on atypical growth and chromosome doubling in plants, III, 1111.
- and Tiber, E., tetraploid rubber plant *Taraxacum koksaghyz* obtained by colchicine treatment, III, 801.
- See also Schmuk, A.
- Kostuch, Z., anti-groupal enzymes of *B. perfringens*, III, 196.
- See also Hirsfeld, L.
- Kotake, M., and Kuwada, K., toad poisons. X. Constitution of bufalin, II, 442.
- Sakan, T., and Kusumoto, S., chemical constitution of strychnine. IX. β -Strychnine and its derivatives, II, 290.
- See also Kuwada, K., and Yokoyama, M.
- Kotastine, W. V. See Abhyankar, V. S.
- Koteswaram, P., molecular association in fatty acids, I, 122. Dissociation in sulphuric acid with temperature, I, 144. Molecular association in mixtures of acetic acid and acetone, I, 261. Molecular association in formic and benzoic acids, I, 355.
- Kothari, D. S., lower limit to energy evolution in stellar matter, I, 56. The meson and cosmology, I, 595.
- See also Majumdar, R. C.
- Kothe, K. See Leschewski, K.
- Kotkova, K. I., phosphatase of brain tissue of various animals, III, 788.
- Kotliar, A. M., and Podrovezek, V., polarographic proof of proteolysis in diagnosis with enzyme reaction, III, 280.
- Koton, M. M., decomposition of mercury diphenyl in alcohols, II, 292. Reaction between mercury diphenyl and monobasic organic acids, II, 566.
- See also Kobeko, P. P.
- Kotscheschkov, K. A. See Bobaschinskaja, T. S., Pikina, E. I., Scheverdina, N. I., Shitkova, L. A., and Talalaeva, T. V.
- Kotschnev, N. See London, E. S.
- Kottler, A. See Schöpf, C.
- Kottmeier, H., action of basergin, neogynergen, and gynergen in obstetrics, III, 89.
- Kōtuka, K., irreciprocal conduction of excitation between auricle and ventricle, III, 655.
- Kotz, J., and Parker, E., clinical interpretation of endometrial biopsy in 300 cases, III, 586.
- Kouang-Tao, L. See Bloch, L.
- Koutny, O. See Čupr, V.
- Kovács, F., action of female sex hormones, III, 684. Ageing and menopause in women, III, 684.
- Kovacs, I., perturbations between ϵ -terms of like multiplicity, I, 167.
- See also Budé, A.
- Koval, T. E. See Fisher, P. Z.
- Kovalenko, V., theory of the thermoelectric couple, I, 341.
- Kovaleva, O. I. See Kupletski, B. M.
- Kovaleva, O. V. See Tschagovetz, R. V.
- Kovalki, V. V., seasonal variations in tissue composition of vertebrates, III, 155. Buffer properties of nervous tissue, III, 470.
- Kovarskaja, B. See Margaritov, V.
- Kovarsky, V., should left-handed people be re-educated? III, 247.
- Kovats, J., influence of iron and molybdenum on nitrogen fixation by *Azotobacter* in presence of humus matter or ash constituents, III, 792.
- Koven, A. L., and Beard, H. H., creatine-creatinine metabolism and hormones. II. Progesterin and antuitrin-T, III, 974.
- Kovitz, J. See Young, R. C.
- Kovochatski, I. P., and Kalinin, S. K., spectroscopic character of the thermal of the Transilian Alatau (Tyan-Shan), I, 434.
- Kowalewska, A. See Bobrański, R.
- Kowalewski, M., measurements of intensity of Raman lines, I, 300.
- Kowaloff, I., lead poisoning, III, 1088.
- Kowarschik, J., magnetic field of solenoid in short-wave therapy, III, 783.
- Kowarski, L. See Dodé, M., and Halban, H. von, jun.
- Kowarzyk, H. See Fegler, J.
- Koyama, S. See Hashimoto, A.
- Koyanagi, J., micro-determination of lipin-phosphorus by titration with alkali, III, 344.
- Koyanagi, T., effect of potassium on carbohydrate content in leaves and stalks of rice plants, III, 1109.
- Kozakevitsch, P. P., Leiba, S. P., and Komar, E. P., viscosity of ternary systems forming Martin slags; system $\text{FeO}-\text{CaO}-\text{SiO}_2$, I, 559.
- Kozakova, See Tovbin, M. V.
- Kozawa, K., Iwatsura, R., and Tamara, M., influence of diseases on total blood-fat and -lipins, and on their distribution between plasma, serum, and cells, III, 13.
- Kozelka, F. L., Nelson, D. E., and Tatum, H. J., determination of barbituric acid derivatives in tissues and body-fluids, III, 1020.
- Kozhantshikov, I. W., carbohydrate and fat metabolism in adult lepidoptera, III, 708.
- Kozintzev, A. See Schlivitsch, B.
- Kozirev, B. M., and Salichov, S. G., dependence of absorption of weak high-frequency electrical fields by substances on the tension of these fields, I, 405.
- Kozlov, V. V. See Voroshcov, N. N.
- Kozlowski, A., absorption of phosphorus by plants in relation to concentration of hydrogen ions in the medium, III, 339. Colour reactions of urine, III, 276.
- Kozodaev, M. See Alichanov, A. I.
- Kozol, H. L., thalamic dysfunction; report of a case in which a thalamic syndrome was treated by excision of a porencephalic cyst, III, 246.
- Kozuchowski, Z. See Centnerszwer, M.
- Kraak, H. H. See Moerman, N. F.
- Kraatz, C. P., effect of brief experimental hyperthyroidism on reproduction in the rat, III, 975.
- Krabbe, W., and Schmidt, K. H., vinylamines. I, II, 149.
- Kracek, F. C., phase equilibrium relations in the system, $\text{Na}_2\text{SiO}_3-\text{Li}_2\text{SiO}_3$, I, 524. Phase equilibrium relations in the system $\text{Na}_2\text{SiO}_3-\text{Li}_2\text{SiO}_3-\text{SiO}_2$, I, 612.
- Morey, G. W., and Merwin, H. E., system water-boron oxide, I, 200.
- Kracke, R. R., relation of drug therapy to neutropenic states, III, 114. Neutropenic diseases, III, 227.
- Kraemer, E. O. See Sanigar, E. B.
- Krämer, K., intensity distribution and half-width value of neon lines especially at low temperature, I, 165.
- Kränze, Y., and Parade, G. W., Cushing's syndrome caused by a teratoma of the ovary, III, 378.
- Kranzlein, P., Friedel-Crafts reaction. III. Condensation of acylarylamides and aromatic and heterocyclic amines with phthalic anhydride, II, 28.
- Krahl, M. E. See Clowes, G. H. A.
- Krahulik, L., Rudomanski, V., and Cunningham, G., intramuscular administration of antipneumococcal serum in infants and children, III, 859.
- Krainick, H. G., photometric micro-determination of silver, I, 216.
- and Müller, Friedrich, physiology and pathology of intermediate fat metabolism. VI. The diabetic diurnal blood-ketone curve, III, 298.
- See also Katsch, G.
- Krajevitch, A. See Portes, L.
- Krajewski, F., action of various diets on gastric secretion. V. Action of salt-free diet and of various saline solutions, III, 269. Experimental intestinal fistula, III, 270.
- Krajuchin, B. V., new induction method of leading off nerve action currents. I, III, 128. Electric discharge of *Raja clavata*, III, 132.
- Krall, H., tautomerism of nitrous acid, I, 333.
- See also Lai, K. B.
- Krallinger, H. F., chromosomes of domestic animals, III, 348.
- Kramann, H. See Ehrhardt, K.
- Kramár, J., and Blazsó, S., new syndrome of infancy: disturbance of water metabolism and hypertension, III, 38.
- Kramer, B. See Merksamer, D., and Steiner, Morris.
- Kramer, F. M., preparation of pathological specimens in natural colour, III, 343.
- Kramer, J., transition of amorphous metals to the crystalline state, I, 131. Superconductivity and amorphous modifications of metals, I, 187. Radiation emitted on transformation of amorphous modifications of metals, I, 229.
- Kramer, K., and Winton, F. R., influence of urea and change in arterial pressure on oxygen consumption of isolated kidney of dog, III, 759.
- See also Barcroft, J.
- Kramer, L. I., determining early diagnosis of arteriosclerosis in diabetes, III, 562.
- Kramer, M. See Palmer, C. E.
- Kramer, M. See Whitnah, C. H.
- Kramer, P. J., root resistance as a cause of absorption lag [in plants], III, 1016.
- Kramer, T. C. See Hoff, E. C.
- Kramow, F. See McCall, J. O.
- Krantz, H., effect of ethyl alcohol on cultures of fibrocytes, III, 348.
- Krantz, J. C., jun., and Carr, C. J., diuresis with isomannide, III, 391.
- Carr, C. J., and Forman, S. E., alkyl nitrites. I. Pharmacologic study of a new series of aliphatic nitrites. II. Pharmacology of β -ethyl- α -hexyl α -nitrite, III, 85.
- Krapivine, A. See Sanfoureh, A. A.
- Krase, N. W. See Young, W. S.
- Krasilshchikov, A. I., free energy of the synthesis of carbamide, I, 79.
- and Trainina, S. S., activity of carbamide in aqueous solutions, I, 565.
- Krasina, G. I., photochemical decomposition of benzene vapour. I, I, 573.
- Krasnikov, A. I., powerful X-ray tube. I, 43.
- Krasnobaeva, P. N. See Slobodin, J. M.
- Krasnooschkin, P., and Pumper, E., supersonic absorption in helium, I, 461.

- Krasnova, *T. A.*, Pochil, *P. F.*, and Talmud, *D. L.*, linear phenomena. V. Linear phenomena on a two-dimensional paraffin colloid, I, 609.
- Krasny-Ergen, *W.*, non-thermal action of electrical oscillations on colloids, I, 197.
- Krasowska, *M.* See Elmer, *A. W.*
- Krassina, *G. I.*, photochemical decomposition of benzene vapour. I, I, 620.
- Krassnoff, *D.*, micro-ultrafilter, III, 952.
See also Bridré, *J.*, Levaditi, *C.*, and Lominski, *I.*
- Kratky, *O.*, and Nowotny, *H.*, crystal structure of β -FeO-OH, I, 407.
and Platzek, *P.*, micellar structure and mechanism of deformation of fibrous substances. VIII. Optical study of Hermans' hydrous cellulose fibres and cellulose acetate films, I, 459.
See also Hermans, *P. H.*
- Kratochvil, *K.*, gastric ulcer diet and C-hypovitaminosis, III, 147.
- Kratz, *L.*, glass electrodes, I, 147.
- Kratzl, *K.*, dehydrogenation with selenium in the study of constitution of organic compounds, II, 252.
See also Wacek, *A. von.*
- Kratzsch, *G.* See Simon, *Arthur.*
- Kraul, *L.*, sterility in women, III, 380.
- Krauland, *W.*, intoxication by nitrogen peroxide, III, 866.
- Kraus, *C. A.*, non-coulombic interactions in solutions of electrolytes, I, 198. *J. W. Gibbs*, I, 342, 391.
- Kraus, *M.*, and Mezey, *K.*, estimation of tryptophan in the cerebrospinal fluid (c.s.f.), III, 32.
- Kraus, *O.*, crystal structure and crystallochemical properties of heteropolycompounds; crystallographic and X-ray investigations on a new group of hydrates of 12-heteropolyacids, I, 457.
and Musgnug, *F.*, lattice constants and space-group of wagnerite, $\text{Mg}(\text{MgF})\text{PO}_4$, I, 64.
- Kraus, *R.*, "deflagration" with sodium peroxide as simple analytical process for determination of halogen, sulphur, and other constituents in organic substances, II, 462.
- Krause, *A.*, amphoteric metal hydroxides as mono- and poly-component catalysts, in the rôle of inorganic enzymes. XLIX, I, 270. Lecture demonstration of catalysts in homogeneous and heterogeneous systems, I, 423. Active iron and copper compounds as inorganic catalysts in reactions of peroxidative oxidation, in the light of the theories of oxygen and hydrogen activation, I, 529. Lecture demonstrations of action of uni- and multi-component catalysts in heterogeneous systems, I, 540.
[with Alaszewska, *Z.*, and Sobota, *A.*], amorphous and crystallised oxide-hydrates and oxides. XI.VII. Restriction of "catalase" and "peroxidase" action of amorphous ferric hydroxide, I, 32.
[with Turowska, *A.*, and Kwintkiewiczówna, *L.*], amorphous and crystallised oxide-hydrates and oxides. LII. Activation of X-radiographically amorphous ferric hydroxide "ferment" by traces of cupric hydroxide, I, 207.
- Krause, *A.*, and Fularska, amorphous and crystallised oxide-hydrates and oxides. LI. Catalysed oxidation of formic acid with nitrite-oxygen at 20° in presence of simple and mixed metal hydroxide catalysts, I, 207.
- Kwintkiewiczówna, *L.*, Grochowska, *A.*, and Trzeciakowski, *Z.*, amorphous and crystallised oxide-hydrates and oxides. L. A three-substance catalyst of ferric, cupric, and magnesium hydroxides as an inorganic ferment of extraordinary efficiency, I, 152.
and Lewandowski, *A.*, amorphous and crystallised oxide-hydrates and oxides. XLVIII. Activity of iron rust, I, 37.
- Krause, *A. C.*, and Stack, *A. M.*, citric and malic acids of ocular tissue, III, 1040.
and Tauber, *F. W.*, creatine and creatinine of the ocular tissues, III, 835.
and Weekers, *R.*, formic acid content of ocular tissues, III, 673.
- Krause, *E. H.*, sensitised fluorescence of potassium, I, 166.
- Krause, *F.*, determination of size of crystallites in metal and metallic oxide smokes with X-ray and electron diffraction diagrams and with electron microscope photographs, I, 160.
- Krause, *G.* See Margolis, *H. H.*
- Krause, *H.* See Guertler, *W.*
- Krause, *M.* See Mainzer, *F.*
- Kraushar-Taubenfeld, *T.*, immunobiology of necrotic tissues, III, 209.
- Krauskopf, *B.* See Bergstermann, *H.*, and Labes, *R.*
- Krauskopf, *F. C.* See Moeller, *T.*
- Krauss, *B. H.* See Sideris, *C. P.*
- Krauss, *S.*, perception of illumination, a newly discovered function of the rods, III, 903.
- Krauss, *W. E.*, and Knoop, *C. E.*, effectiveness of ultra-violet light applied to head and back regions of calves, III, 419.
See also Knoop, *C. E.*
- Kraut, *H.*, Schmatolla, *G.*, and Neumann, *R.*, co-enzyme of glycolysis from tumours. IV., III, 519.
- Krautman, *B.*, deproteinising reagent for blood chemistry, III, 356.
See also Goldfarb, *W.*
- Krautwald, *A.*, action of calcium, III, 188.
- Krauz, *C.*, and Štěpánek, *J.*, chemical properties of tetranitromethane, and its probable constitution, II, 466.
- Kravetz, *B.* See Stern, *W.*
- Kravkov, *S. V.*, critical frequency of flicker and indirect stimuli, III, 674. Influence of caffeine on colour-sensitivity, III, 753. Influence of loudness of indirect sound stimulus on colour-sensitivity of eye, III, 1043.
- Kravtsoff, *G.*, nomenclature of heteroacyclic and heterocyclic compounds, II, 290.
- Krebs, *E.*, immediate and late complications of cerebral trauma, III, 670.
- Krebs, *H. A.*, and Örstrom, *A.*, micro-determination of hypoxanthine and xanthine, III, 885.
See also Örstrom, *A.*
- Krebs, *J.* See Fink, *H.*
- Krediet, *G.*, masculinising tumour in hen, III, 684. Ovotestes in horse, III, 738.
- Kreffit, *H.*, and Rössler, *F.*, radiation measurements in the ultra-violet with the barrier-layer cell, I, 501.
- Krehbiel, *R. H.*, and Carstens, *H. P.*, Roentgen studies of mechanism involved in sperm transportation in female rabbit, III, 686.
- Kreider, *H. R.*, spectrograph as an analytical tool for medical use, III, 953.
- Kreienberg, *W.* See Wagner, *R.*
- Kreiker, *A.*, stabilisation, a supplement to Steiger's theory, III, 834.
- Kreindler, *A.* See Sager, *O.*
- Kreis, *B.* See Mollaret, *P.*
- Kreis, *J.*, diagnosis and treatment of functional meno- and metro-rhagia of adolescence, III, 979.
- Kreiselman, *J.* See Eastman, *N. J.*
- Kreitmaier, *H.*, and Sieckmann, *W.*, action of diethylstilboestrol, III, 479.
and Wolfes, *O.*, apototropine, a belladonna alkaloid, III, 180.
- Krejci, *L. E.* See Sanigar, *E. B.*
- Krejci-Graf, *K.*, basic problems of origin of petroleum, I, 164.
- Krejczy, *W.*, diffraction of a current of chemical molecules, I, 406.
- Kreke, *C. W.* See Cook, *E. S.*
- Kremer, *C. B.*, alkanolamines. VI. Physiologically active compounds. I. Preparation of substituted anilino-alcohols, II, 366.
and Bendich, *A.*, alkanolamines. VII. Condensation products of monoethanolamine and the isomeric dichloronitrobenzenes, II, 541.
- Meltsner, *M.*, and Greenstein, *L.*, morpholine condensations, II, 523.
- Kremer, *J.*, pigment deposition in liver and spleen of the frog under different conditions, III, 594.
- Kremers, *R. E.* See Sell, *H. M.*
- Kremser, *G.*, treatment of severe thrombopenic haemorrhage, III, 549.
- Krenn, *L.*, treatment of wounds with irradiated fat (Metuvit), III, 1085.
- Křepelka, *J. H.*, and Rakušan, *B.*, volumetric determination of small amounts of arsenic, I, 577.
and Réso, *Z.*, uranyl salts of substituted organic acids, II, 47.
- Kreschkov, *A. P.*, electronic interpretation of the halogenation of toluene, II, 537.
- Kresling, *E. K.*, effect of radium on citric acid formation by *A. niger*, III, 100. Morphological and biochemical peculiarities of *A. niger* strains which differ in acid yield, III, 100.
and Schtern, *E. A.*, effects of radium and ultra-violet light on growth and citric acid formation in *Aspergillus niger* cultures, III, 100.
See also Protodiakonov, *O. P.*
- Krestinskaja, *V. N.*, and Natanson, *N. E.*, action of hydrochloric acid on colloidal silicic acid, I, 75.
- Kreuder, *E.*, action of morphine, pernocton, evipan, and eunaron on respiratory exchanges in the rabbit, III, 863.
- Kreuger, *A. P.*, and Scribner, *E. J.*, intracellular phage precursor, III, 1106.
- Kreutz, *S.*, metamorphosis of the amphibolite rocks of the Tatra. II., I, 47.
- Kreuzwendich von dem Borne, *E. H.*, acetylindoxyl compounds as cause of blue fluorescence of urine in ultra-violet light, III, 392. Vitamin-C deficiency, III, 768.
- Krewson, *C. F.*, mechanical stirrer, I, 434.
- Kreyberg, *L.*, influence of dinitroresol on development of fat tumours in mice, III, 764.

- Kriagova, A. I., system $\text{CaO-SiO}_2\text{-H}_2\text{O}$, I, 81. Preparation of calcium hydro-silicates by hydrothermal synthesis, I, 210.
- Kribben, B. D. See Glatfield, J. W. E.
- Kriebler, V. K., and Holst, K. A., amide hydrolysis with high concentrations of mineral acids, I, 85.
- and Noll, C. I., hydrolysis of nitriles with acids, I, 269.
- Kriegel, K., vitamin- B_1 therapy of neuritis, III, 286.
- Krieger, F. H. See Beck, H.
- Krieger, V. I., histidine in urine as indication of pregnancy, III, 151.
- Krijsman, C., positive electrode of a carbon arc in air as an absolute standardised lamp, I, 49.
- Krings, W. See Gott, O.
- Kringstad, H., and Lunde, G., filtrate growth-promoting factor, B_w , III, 1071.
- and Naess, T., colorimetric determination of nicotinic acid and nicotinamide, II, 44.
- See also Lunde, G.
- Krinitzki, V. V. See Fritzman, E. C.
- Krinsky, E., psychologic considerations in study of binocular fusion, III, 837.
- Krishnamurthy, C. See Guha, P. C.
- Krishnamurti, B., origin and elimination of the mass of opaque globules bathing the internal organs of aphids, III, 156.
- Krishnamurti, P. V. See Rao, W. V. S.
- Krishnamurthy, S. G. See Rao, A. B.
- Krishnan, B. G., calorie requirements of South Indian children, III, 606. Diet surveys in the Nilgiris and Travancore, III, 917.
- See also Aykroyd, W. R.
- Krishnan, K. G., dispersion of ultrasonic velocity in liquids, I, 409.
- Krishnan, K. S., Jahn-Teller theorem and arrangement of water molecules around paramagnetic ions in aqueous solutions, I, 364.
- and Banerjee, S., magnetic studies on rhodochrosite, MnCO_3 , I, 14. Magnetic anisotropy of manganite crystal in relation to its structure, I, 246.
- and Ganguli, N., temperature variation of the magnetic anisotropy of graphite, I, 460.
- and Mookherji, A., magnetic anisotropy of $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ in relation to its crystal structure, III, I, 65.
- Mookherji, A., and Bose, A., magneto-crystalline action. VI. Paramagnetic crystals, I, 361.
- and Seshan, P. K., directional vibrations in the absorption and the fluorescence of the chrysene molecule, I, 123.
- Krishnan, P. S., and Krishnaswamy, T. K., protein and other nitrogenous constituents of water melon seeds (*Citrus vulgaris*), III, 951.
- See also Damodaran, M.
- Krishnan, R., and Jatkar, S. K. K., equilibria in electrodeless discharge. VI. Influence of rate of flow on the formation of ozone in the Siemens ozoniser, I, 208.
- Krishnan, R. S., anomalous depolarisation of light-scattering in optical glasses, I, 121. Influence of secondary scattering on depolarisation measurements, I, 416.
- and Gant, D. H. T., deuteron bombardment of silver, I, 592.
- Krishnaswami, K. R. See Jayaraman, N.
- Krishnaswamy, S., heavy mineral assemblages of the Burma oil-fields, I, 436.
- Krishnaswamy, T. K. See Krishnan, P. S.
- Kriss, M., metabolism of amino-acids with special reference to respiratory exchange and heat production, III, 499.
- and Smith, A. H., change in total energy metabolism of rats receiving a diet deficient in inorganic constituents, III, 162. Oxidative changes induced by a mineral-deficient diet, III, 162.
- Kristenson, A., variations of thrombocytes during and after parturition, III, 231.
- Krizev, E. E., polypeptidemia in circulatory insufficiency, III, 459.
- Kritschewski, I. L., reinforcement of therapeutic action of anti-malarial quinoline compounds, III, 307.
- Kritschewski, I. R., Hildebrand's method of proving "what substances can obey Raoult's law at all pressures and temperatures", I, 604.
- and Chazanova, N. E., gas-vapour solutions at high pressures, I, 605.
- and Kazarnovski, J. S., equation of state for gas mixtures, I, 516. Equation of state for gaseous mixtures, I, 605.
- Kritschewtzov, B. K. See Joffe, J. S.
- Kritzmann, M. G., enzyme system transferring the amino-group of aspartic acid, III, 721. Isolation of the enzyme effecting transfer of the amino-group of glutamic acid, III, 721.
- Kriukova, T. A., oxidation of phosphorus at solid surfaces, I, 531.
- Krivitsch, S. S., infra-red absorption spectrum of liquid hydrazine, I, 449.
- Krivoschlikov, N. F., and Platonov, M. S., colour reactions of polyphenols with niobium and tantalum salts, I, 537.
- Krivov, M. Z., photometer with a selenium photo-element, I, 43.
- Kriagova, A. I. See under Kriagova, A. I.
- Krober, O. A. See Dains, F. B.
- Kroc, R. L., effect of previous castration on weight loss and survival of adrenalectomised rats, III, 43.
- Kroger, C., and Ilner, K. W., systems alkali oxide- $\text{CaO-Al}_2\text{O}_3\text{-SiO}_2\text{-CO}_2$. VII. Influence of catalysts on the establishment of the calcite-wollastonite equilibrium. VIII. Reaction pressures of quartz and diasilicate with alkali double carbonates, I, 147, 420.
- Kroger, F. A., luminescence and absorption of ZnS-MnS mixed crystals, I, 301. Solid solutions in the system zinc sulphide-manganese sulphide, I, 464. Fundamental absorption of ZnS-MnS and ZnS-CdS-MnS mixed crystals, I, 509. Optical properties of zinc silicate phosphors, I, 509.
- Kroeger, W. J., binding energy of ^{16}O , I, 118.
- Kröhnke, F., nitrones. II. III. *cis-trans*-Isomerism of anils? IV. Carbenate zwitterions of the pyridinium series, II, 67, 226. Enimine betaines. I, II, 124.
- and Schmeiss, H., *aci*-nitrobetaines, II, 179.
- Krönig, F., and Wepler, W., large lipomyxomatous fibroma of the psosfascia in a guinea-pig, III, 280.
- Kroetz, C., intravenous strophanthin therapy, III, 712.
- See also Gollwitzer-Meier, K.
- Krogh, A., salt concentration in tissues of marine animals, III, 68. Active uptake of ions into cells and organisms, III, 856.
- Krogman, W. M., contributions of T. Wingate Todd to anatomy and physical anthropology, III, 957.
- and Schultz, A. H., anthropoid ape material in American collections, III, 544.
- Kroker, F., vitamin-C content of tinned food, III, 290.
- Krokowski, T., precipitation of tin from alkaline solution with bromine water, I, 490.
- Krokström, T., diabase or dolerite—a question of nomenclature, I, 541.
- Kroll, H. See Price, C. C.
- Kroll, W., reducibility of beryllium oxide, I, 273.
- Krombach, E. See Schairer, E.
- Kronfeld, P. C., and Lin, C. K., regeneration of the aqueous humour in man, III, 254.
- Kronig, R. de L., theory of relaxation phenomena, I, 132. Mechanism of paramagnetic relaxation, I, 132.
- and Bouwkamp, C. J., spin levels and paramagnetic dispersion in iron ammonium alum, I, 247.
- Kroon, D. B. See Freud, J.
- Krosák, A. See Votoček, E.
- Kroszczynski, S., and Bychowska, M., oestrogenic action of sage (*Salvia officinalis*), III, 684.
- Kroupa, E., micro-gravimetric separation of nickel and uranium, I, 41. Micro-gravimetric separation of zinc and uranium, I, 385. Measurement of geological time by analysis of monazite. I. Determination of lead and thorium, I, 542.
- Kroupsky, A. I., and Blonskaia, A. A., sterilisation of white mice by instillation of follicular hormone into the vagina, III, 56.
- Kroustein, J. See Courtot, C.
- Krücke-Amelung, D. See Brand, K.
- Krückeberg, B. See Haagen, E.
- Krüger, A., volumetric determination of alkali sulphate, I, 625.
- Krueger, A. P., and Mundell, J. H., demonstration of phage precursor in the bacterial cell, III, 334.
- and Scribner, E. J., serial production of phage from intracellular phage precursor, III, 878.
- and Strietmann, W. L., effect of sodium sulphate on the phage-bacterium reaction, III, 207.
- Krüger, E., agranulocytosis, III, 1027.
- Krüger, Erich. See Gollwitzer-Meier, K.
- Krüger, F., and Jungnitz, H., dependence of the modulus of elasticity, elastic limit, and tensile strength of palladium on its hydrogen content, I, 408.
- Krüger, G., weathering experiments on leucite, I, 343.
- Krüger, H., decomposition of lactose and sucrose by the enzymes of Gartner's bacillus, III, 331.
- Krüger, Hubert, concentration of the ^{15}N isotope and spectroscopic investigations on ^{15}N , I, 165.
- Krueger, J. W., and Mosettig, E., phenanthrene series. XX. Nitration of 9:10-dihydrophenanthrene, II, 55.
- See also Mosettig, E.
- Krüger, Werner. See Hilpert, R. S.
- Krüger, Wilhelm, action of ascorbic acid on serum-lipase, III, 496.
- Krüskenper, C. See Blumberger, K.

- Kruger, P. G., and Phillips, L. W., sodium-like spectra of potassium, calcium, and scandium, I, 227.
- Stallmann, F. W., and Shoupp, W. E., nuclear energy levels in ^{10}B , I, 546.
- See also Pattin, H. S., and Phillips, L. W.
- Kruglick, J. S. See Novak, J. B.
- Kruihin, A. S., Samoilov, V. I., and Schestialtinov, M. S., changes in carbohydrate and nitrogen content of sunflower with reference to irrigation, III, 109.
- Kruirova, N. N. See Smorodincev, I. A.
- Kruis, A., and Kaischew, R., investigation of the transitions of condensed hydrogen halides with the polarisation microscope, I, 131.
- See also Clusius, K., and Grafe, D.
- Krumhaar, E. B., and Lippincott, S. W., post-mortem weight of "normal" human spleen at different ages, III, 743.
- See also Hwang, J. M. S.
- Krumey, F. See Schöberl, A.
- Krumholz, P., new forms of micro-volumetric apparatus, I, 222. Arrangement for electrometric micro-volumetric analysis, I, 222.
- Krupski, A., Schaaf, F., Kunz, A., Almasy, F., Sutter, K., and Nahholz, A., exercise at high altitudes, III, 366.
- Krusen, F. H. See Prickman, L. E., and Randall, L. M.
- Krustinsons, J., thermal dissociation of latinum tetrachloride, I, 145. Thermal behaviour of compounds important in analytical practice. I. Calcium oxalate monohydrate, I, 621. Behaviour of carbamide on heating, II, 11.
- Kruta, V., effect of calcium on the myocardium, III, 454.
- Krutschakova, F. A., effect of functional changes in muscles on their sodium, potassium, calcium, and magnesium content, III, 243.
- Kruyk, K., and Klingmüller, V., mechanism of alcoholic fermentation with living yeast, III, 520.
- Kruyze, A., precipitate in "meditreen" solutions, III, 179.
- See also Zwickler, J. J. L.
- Kruyt, H. R., and Oosterman, J., electrokinesis with metals, I, 78.
- See also Jonker, G. H.
- Krzyzanski, S., coloured Ti^{III} oxides, I, 531.
- Ksanda, C. J., and Merwin, H. E., micro-pyknometric density determination, I, 581.
- and Tunell, G., unit cell and space group of β -glycine, I, 186.
- See also Tunell, G.
- Ksenofontov. See under Xenofontov.
- Ksinsik, H. See Grüniger, U.
- Kubaschewski, O., and Walter, A., adiabatic high-temperature calorimeter for the determination of heat changes occurring during alloy formation, I, 579.
- and Weibke, F., relation between heats of fusion of intermetallic compounds and the m.p.; calculation of heats of formation and of mixing, I, 28. Alloys of indium with gold, I, 69.
- Kubieczek, G., and Schrecker, A., electrically heated m.p. apparatus for corrected m.p. in a temperature range of 20–400°, I, 388.
- Kubin, R. See Vidgoff, B.
- Kubo, H., Kanasugi, S., Kamakura, K., Ogiwara, G., and Yoshikawa, K., pancreas secretion induced by hydrochloric acid, III, 483.
- Kubo, Hideo. See Tamiya, H.
- Kubo, I., and Odani, S., corticalisation of function and functional localisation in the cerebral cortex, III, 571.
- Kubo, M., and Yuge, A., relation between fibre-diameter and internodal distance in peripheral nerves, III, 568.
- See also Mizuta, N.
- Kubo, Masaji, dielectric constants of solid acetylene tetrachloride, ethylene dichloride, and ethylene chlorobromide, I, 356.
- Kubo, T., enhancement of parallelism of micelles in natural cellulose; (a cellulose preparation with the highest possible degree of orientation), II, 359.
- Kubo, Taizo, oral administration of male sex hormones, III, 590.
- Kubota, H., influence of fine structure on the Stark effect of ionised helium, I, 165. Variation in intensities of spectral lines with direction of observation of the Stark effect, I, 393.
- Kubota, T., regeneration of blood. I. and II., III, 810.
- Kubota, Tutomu, polymerisation of chloroprene as revealed by the Raman effect, I, 150.
- See also Mizushima, S.
- Kubowitz, F., hydrolysis and resynthesis of polyphenol oxidase and of haemocyanin, III, 97.
- Kucera, A. See Boucek, B.
- Kucharenko, T. A., reactions of humic acids with neutral salts, II, 140.
- Kucharik, I. See Sellei, C.
- Kuchárik, J., rôle of pressor substances in treatment of arsenic shock, III, 616.
- Kucher, J., and Zutt, J., atropine dosage in parkinsonism, III, 830.
- Kuczyński, H., Kuczyński, L., and Sucharda, E., aromatic sulphone-sulphonic acids, II, 260.
- Kuczyński, J. See Kuczyński, H.
- Kudienko, I. M., respiratory and circulatory disturbances in traumatic shock, III, 364.
- Kudra, O. K., thermic elements, I, 84. Influence of temperature on cathode processes, I, 88.
- Kudrjatzewa, N. G., influence of muscle lysates on nitrogen metabolism, III, 567.
- Kühler, L., homogeneous thermal decomposition of cyclic hydrocarbons, II, 472.
- and Thiele, H., thermal decomposition of ethane by addition of foreign gases, I, 326.
- See also Eucken, A., and Patat, F.
- Kühl, Herbert. See Thiele, W.
- Kühn, A., growth processes and active substances, III, 1110.
- Kuehn, A. J., postoperative inhalation therapy, III, 367.
- Kühnau, W. W., uleron and its derivatives in the body and their excretion in the urine, III, 82. Disseptal neuritis, III, 503. Secretion of albugin in the urogenital tract, III, 859.
- Kühnel, J., sedimentary siliceous rocks, hornstone, and the flint problem, I, 346.
- Kühntz, E. H. See Meltzer, H.
- Külbs, F., complications of intramuscular injections [of quinine or atophanyl], III, 510.
- Külz, F. See Buth, W.
- Kündig, W. See Naegeli, C.
- Kuenen, D. See Warren, Herbert.
- Künstler, W. E., determination of red cell fragility [use of resistometer], III, 892.
- Küntzel, A., and Doehner, K., pasting of starch. I. Photo-electric and ultramicroscopic analysis of pasting. II. Thermometric and conductometric measurements on starch suspensions during pasting. III. Relation between hydration and pasting. IV. Influence of treatment with chromic salts on formation of starch paste. V. Determination of heat of pasting, I, 141, 197, 522.
- Künzel, O. See Keller, C. J.
- Künzle, A., percutaneous calcium therapy, III, 865.
- Küpfer, M., development of the molar teeth in perissiodactyla, III, 346.
- Kürten, F., increase of respiratory minute volume during exercise and at low oxygen pressure, III, 24.
- Kürten, H. F., serum boiling test in diagnosis of malignant disease, III, 848.
- Kuerti, G., and Van Voorhis, S. N., induced radioactivity produced by bombarding aluminium with protons, I, 592.
- Kürti, N., Lainé, P., and Simon, Franz, adiabatic demagnetisation starting from temperatures obtained with solid hydrogen, I, 189.
- and Simon, Franz, "Curie" scale of temperature, I, 14. Thermodynamic scale of temperature, I, 14.
- Küssner, W., belladonna, II, 130.
- Küstner, H., spatial distribution of ionic clouds produced by photo-absorption and scattering absorption in the ionisation of air by X-rays. I, I, 394.
- Kufferath, A., modern microscopic apparatus in chemical research and industrial laboratories, I, 42.
- Kuffner, F. See Spath, E.
- Kuhlenbeck, H., ontogenetic development and phylogenetic significance of the cortex telencephali in the chick, III, 32.
- Kuhlmann, vascular spasm in bronchial asthma, III, 659.
- and Schütt, H., X-ray kymographic cardiac function test, III, 656.
- Kuhlmeier, W., action of male sex hormone on diabetic and extrapancreatic glycosuria, III, 144.
- Kuhn, F., measurement of growth of moulds: influence of gas pressure, III, 521.
- Kuhn, H. See Neufeld, F.
- Kuhn, R., Andersag, H., Westphal, K., and Wendt, G., vitamin- B_6 , a derivative of 3-hydroxypyridine, II, 177.
- Birkofer, L., and Quackenbush, F. W., iodometric titration of SH groups; micro-determination of cysteine and methionine in proteins, II, 196.
- and Grundmann, C., preparation of the higher aliphatic glycol ethers from crotonaldehyde, II, 3.
- and Low, I., specific colour reaction of adermin, II, 387. Oxidation of methyl groups in the animal body, III, 773.
- and Wallenfels, K., chemical nature of the substance secreted by the eggs of *Arbacia pustulosa* to allure the spermatozoa, II, 482.
- Wallenfels, K., Weygand, F., Moll, T., and Heding, L., specificity of vitamin-K, III, 923.
- and Wang, Y., synthesis of tetradeca-acetylcrocetin and related compounds, II, 246.

- Kuhn, R., and Wendt, G., re-conversion of adermine methyl ether into adermine, II, 177. Oxidative degradation of adermine, II, 177. Promotion of growth in rats by adermine, III, 166.
- Wendt, G., and Westphal, K., constitution of adermine, II, 177.
- Westphal, K., Wendt, G., and Westphal, O., synthesis of adermine, II, 487.
- Wieland, T., and Huebschmann, H., chemical agent in nerves; acetylcholine, III, 665.
- See also Hartmann, M.
- Kuhn, W., relation between viscosity and elastic properties of amorphous substances, I, 192. Elasticity and viscosity of highly polymerised compounds, I, 320. Molecular assemblage and crystallite orientation as causes of rubber-like elasticity, I, 320.
- Kuhner, J. A. See Mohr, W.
- Kuhr, E., equivalent conductivity of sodium cholestenesulphonate, I, 324. Sulphonation of cholestenone as 1:4-addition, II, 270.
- Kuhs, M. L., Longley, B. J., and Tatum, A. L., development of tolerance to organic arsenicals in laboratory animals, III, 864.
- Kuile, R. C. ter, relative efficiency of two types of ergot preparations in control of post-partum bleeding, III, 89.
- Kuiper, G. P., magnitude of the sun, the stellar temperature scale, and bolometric corrections, I, 175.
- Kuipers, R. K. W. See Touw, J. F.
- Kuizenga, M. H., and Cartland, G. F., fractionation of adrenal cortex extracts, III, 581.
- Kukla, A. See Glazunov, A.
- Kulashina, L. P. See Neumark, E. J.
- Kulberg, L. M., application of sodium phenolphthaleinate to volumetric microanalysis, I, 37. Use of benzidine and o-tolidine in chemical analysis, I, 156. Application of organic redox systems to chemical analysis. V. Detection of traces of osmic acid, I, 280. Connexion between complex formation and oxidation-reduction reactions. II. Reactions of cupric salts with aromatic redox systems, I, 522. Hydroxy- and amino-azo-nitro-compounds. I. Adsorption of *p*-nitrobenzenazo- α -naphthol on magnesium hydroxide. II. α -Naphtholazo-*p*-nitrobenzene as an indicator for hydrogen ions in non-aqueous solutions, I, 624; II, 257.
- Kulchar, G. V. See Beckh, W.
- Kuleschov, I. M. See Spitzin, V. I.
- Kulkarni, B. S., and Jatkar, S. K. K., detergent action of soaps. I. Interfacial tensions of pure soap solutions, I, 74.
- Knll, J., strophanthin and cholinergic mechanism of the heart, III, 895.
- See also Staub, H.
- Kulman, A. G., and Chrapov-Schmarov, G. A., determination of copper as thiocyanate by a rapid extraction method, I, 40.
- Kumasawa, M., anti-luetic action of lead salts, III, 509.
- Kummer, H. J., morphological changes in thyroid gland after injection of thyrotropic anterior pituitary hormone, III, 48.
- Kuna, M. See Levene, P. A.
- Kundt, W. See Suhrmann, R.
- Kunert, H., test for permanent cure of *Bilharziasis hematobia* by Bayer 205, III, 929.
- Kunerth, B. L., and Pittman, M. S., long-time study of nitrogen, calcium, and phosphorus metabolism on a low-protein diet, or a medium-protein diet, III, 700.
- See also Whitnah, C. H.
- Kung, L. C., and Yeh, H. L., nitrogen, calcium, and phosphorus balances of rural adolescent boys on low-cost diets, III, 72.
- Yeh, H. L., and Adolph, W. H., availability of calcium in vegetable food materials, III, 72.
- Kunimine, S., and Suzuki, Shintaro, constituents of *Forsythia koreana*, Nakai, II, 358.
- and Wada, S., constitution of forsythine, II, 435.
- Kunitz, M., formation of new crystalline enzymes from chymotrypsin; isolation of β - and γ -chymotrypsin, III, 199. Effect of the formation of inert protein on kinetics of the autocatalytic formation of trypsin from trypsinogen, III, 423. Purification and concentration of enterokinase, III, 624. Formation of trypsin from crystalline trypsinogen by enterokinase, III, 624. Isolation from ox pancreas of a crystalline protein possessing ribonuclease activity, III, 1009.
- Kunkel, P., and Stead, E. A., jun., blood flow and vasomotor reactions in the foot in health, arteriosclerosis, and thromboangiitis obliterans, III, 21.
- Stead, E. A., jun., and Weiss, S., blood flow and vasomotor reactions in the hand, forearm, foot, and calf in responses to physical and chemical stimuli, III, 458.
- See also Stead, E. A., jun.
- Kuno, Y., adaptation of human sweat apparatus to hot climates, III, 620.
- Kunsági, A., amino-acids of blood in diphtheria gravis, III, 816.
- Kunstadter, R. H., induction of premature puberty with androgenic substance, III, 53. Waterhouse-Friderichsen syndrome [adrenal haemorrhage], III, 1051.
- See also Saphir, W.
- Kuntz, A., histological variations in autonomic ganglia and ganglion cells associated with age and disease, III, 132.
- and Hamilton, J. W., afferent innervation of the skin, III, 568.
- Kunz, A. See Krupski, A.
- Kunz, H. See Drigalski, W. von.
- Kunz, K., hydrogen linkings in organic compounds, II, 353.
- Kunz, R. M., substances with oestrogenic activity, III, 982.
- Kuo, C. C. See Maxwell, J. P.
- Kuo, P. T., cardiovascular manifestations of beri-beri, III, 993.
- Kupas, J., action of vitamin-B₁ and -C in vomiting, III, 766.
- Kupletski, B. M., and Kovaleva, O. I., rational quantitative mineralogical classification of granitoids, I, 498.
- Kupper, W. H. See Kitchen, S. F.
- Kupperman, H. S., Meyer, R. K., and Hertz, R., effect of antigonadotropic sera on gonadotropic secretion in parabiotic rats, III, 259.
- See also Meyer, R. K.
- Kuppusami, A. See Jois, H. S.
- Kuraš, M., reactions of thiolbenzothiazole, I, 40. Salts of thiolbenziminazole, I, 532. Thiolbenziminazole as an analytical reagent, I, 535.
- Kurdjumov, G. See Gridnev, V.
- Kure, K., Sahara, T., and Okinaka, S., experimental production of lipomatosis, III, 36.
- Kurek, S., changes in the blood and haemopoietic organs in experimental thyrotoxicosis in rabbits, III, 227.
- Kuriaki, P. K. See Tiffeneau, M.
- Kuribayashi, S., blood picture of "healthy" infants nursed with human milk of different Arakawa's reaction, III, 645.
- Kurita, Y. See Taniguchi, T.
- Kurnakov, N. N., and Boki, G. B., crystals of ferro-silicon, I, 251.
- Kurnakov, N. S., and Nikitina, E. A., ice-field in the system FeCl₃-HCl-H₂O, I, 265.
- and Nikolaev, A. V., 25° isotherm of the quaternary system CaCl₂-MgCl₂-NaCl-H₂O and the Perokop calcium chloride lakes, I, 265.
- Voskresenskaja, N. K., Goltzman, N., and Schuvalov, M., viscosimetry of binary liquid systems containing bromine or water and organic substances, I, 262.
- Voskresenskaja, N. K., and Gurovitsch, G. D., viscosity and fusibility of binary systems containing antimony tribromide and aniline (or its derivatives), I, 261.
- Kurnosova, P. V., and Aschkinazi, M. S., Raman effect in non-aqueous solutions of antimony trichloride. III, I, 58.
- See also Aschkinazi, M. S.
- Kuroda, C., syntheses of hydroxydroserone (the pigment of *Drosophila whitakeri*), phthiocol (the pigment of human tubercle bacillus), and naphthapurpurin; studies of related compounds, II, 513.
- and Wada, Mizu, constitution of shikonin. II. Synthesis of alkyl derivatives of naphthazarin, naphthapurpurin, and related compounds, II, 168.
- Kuroda, E. See Ishikawa, S.
- Kuroda, G., "tan" as a medicine, III, 619.
- Kuroda, K., occurrence of germanium in hot springs of Senami, I, 541. Occurrence of beryllium in hot springs of Matunoyama, I, 541. Vanadium, chromium, and molybdenum contents of the hot springs of Japan, I, 628.
- Kuroda, M. See Masima, M.
- Kurono, G., sweet constituents of liquorice root, II, 436.
- Kurosawa, T., lipin factor in blood coagulation, III, 117.
- Kurotchkin, T. J. See Wong, S. C.
- Kuroyanagi, S. See Ochiai, E.
- Kurrelmeyer, B. See Keesom, W. H.
- Kursanov, D. N., Kursanova, A. S., and Blochina, A. N., action of azoxy-compounds on magnesium aryl halides, II, 257.
- Kursanova, A. S. See Kursanov, D. N.
- Kurschakov, N. A., role of vessels in circulatory insufficiency, III, 459.
- Kurt, W., case of puerperal porphyria, III, 407.
- Kurth, C. J. See Conwell, D. V.
- Kurth, E. F., preparation of polyhydroxy-chalkones, II, 266.
- Kurtz, A. C., and Wilson, D. W., saccharolactone as reagent for precipitating amines, II, 463.
- Kurtz, P., anticid properties of magnesium trisilicate in normal subjects and patients with peptic ulcers, III, 842.

- Kurtz, S. S., jun. See Ward, A. L.
- Kurylowicz, W., *Bact. scleroma* in its relation to the capsulated bacteria, III, 205.
- Kurzrok, L., Birnberg, C. H., and Livingston, S., treatment of the menopause with male sex hormone, III, 481.
- Kurzrok, R. See Mulinos, M. G., Watson, B. P., and Wilson, L.
- Kurzrote, R., and O'Connell, C. P., inhibition of lactation during the puerperium by testosterone propionate, III, 55.
- Kurzyniec, E., variations in resistance of tin-thallium alloys at low temperatures, I, 251. Variation of electrical resistance of tin-zinc and lead-antimony alloys at low temperature, I, 313.
- Kusaka, S. See Christy, R. F., and Val-larta, M. S.
- Kusakabe, S. See Reiss, M.
- Kusano, S., proteins and colloid osmotic pressure of blood perfusing a skeletal muscle. I. Normal dogs. II. Dogs deprived of kidney function. III. Dogs with liver damage. IV. Dogs with hyper- and hypo-thyroidism, III, 652.
- Kusch, P., and Loomis, F. W., magnetic rotation spectra of sulphur dioxide and carbon disulphide in the ultra-violet, I, 353.
- and Millman, S., nuclear magnetic moments of the isotopes of rubidium and chlorine, I, 590.
- Millman, S., and Rabi, I. I., nuclear magnetic moment of beryllium, I, 298. Nuclear magnetic moments of ^{14}N , ^{23}Na , ^{39}K , and ^{133}Cs , I, 447.
- Tate, J. T., and Hustrulid, A., products of dissociation of benzene vapour by electron impact, I, 2.
- See also Hustrulid, A., Millman, S., and Rabi, I. I.
- Kuschinsky, G., [pituitary and] water metabolism, III, 48. Effect of water and novasurol on antidiuretic pituitary hormone, III, 974.
- and Bundschuh, H. E., diuretic action of posterior pituitary extracts, III, 578. Diuretic substance in posterior pituitary extracts, III, 907.
- and Liebert, P., influence of water, saline, and novasurol on hormone content of posterior pituitary in rats, III, 907.
- See also Bundschuh, H. E.
- Kuschner, H. F., blood value of the Yaroslavl breed of cattle with reference to productivity, III, 352. Changes in blood of draft horses during work and rest, III, 810.
- Kuschnerev, M. J., and Schechter, A. B., preparation of acetylene in the interrupted discharge, I, 573.
- Kushta, G. P. See Adadurov, I. E.
- Kushner, J. I., clinical experiences with ergonovine, III, 89.
- Kusizaki, S., influence of the forebrain on the blood picture and body temperature, III, 468.
- Kusova, Z. B., Markanjan, E. A., Michailova, A. A., and Oppel, V. V., experimental production of antrachitic preparations from sterols, III, 169.
- See also Tultschinskaja, K. Z.
- Kussakov, M. See Derjaguin, B.
- Kusmann, A., detection of superstructure phases in the nickel-iron system, I, 559.
- Kuster, W. See Fierz-David, H. E.
- Kusumoto, S. See Kotake, M.
- Kuthan, S., pathogenesis and treatment of aplastic conditions of the bone marrow, III, 446. Therapeutic use of vitamin-C, -B₁, and A, III, 850.
- Kutschera-Aichbergen, H., treatment of hyperemesis gravidarum, III, 587.
- Kutschinski, E. See Jofa, S.
- Kuvaja, A. M. See Komppa, G., and Nyman, G. A.
- Kuvarzina, M. V. See Nazarov, I. N.
- Kuvshinski, E., amorphous state. XIV. Thermal conductivity of amorphous bodies within the range of softening, I, 311.
- See also Kobeko, P. P.
- Kuwada, J., and Kotake, M., toad venom. IX. Constitution of einobufagin, II, 277.
- Kuwada, K. See Kotake, M.
- Kuwada, S., and Miyasaka, M., sterols. XIII. Esters of methyltestosterone. XIV. Ketone cyanohydrins, II, 378, 421.
- and Nakamura, Katutaro, sterols. XVI. Monoalkyl 3-hydroxy-4 β - α -tio-bilienates. XVII. Synthesis of trans-dehydroandrosterone, II, 431.
- and Yosiki, S., sterols. XV. Synthesis of 4 β -bisancholestene-3:24-dione, II, 379.
- Kuwahara, T. See Toriumi, T.
- Kuwata, T., catalytic action of Japanese acid clay on terpene compounds. VI. Hydration of limonene with acetic acid, II, 514.
- Kuzin, A., synthesis of sugars from formaldehyde. VI. Mechanism of the reaction, II, 49. Synthesis of glycolic and glyceric aldehydes, II, 49.
- Kuzminich, I. N., and Turchan, E. J., colorimetric determination of oxides of nitrogen, I, 38.
- Kuznetsov, A. I. See Dubinski, A. M.
- Kuznetsov, A. M., metamorphism of the subterranean waters of Lovshino, I, 434.
- Kuznetsov, G. See Tschelincev, V. V.
- Kuznetsov, T. J. See Mardashev, S. R.
- Kuznetzova, M. N. See Bergman, A. G.
- Kvater, G. S., measurement of spectrum line intensities by the anomalous dispersion method, I, 228.
- Kviat, E. I., influence of freezing on the formation of structures in colloidal basic iron salts, I, 469. Influence of freezing on the formation of structures in colloidal basic aluminium salts, I, 469.
- Kwal, B., counting effects in [discharge] tubes with plane parallel electrodes, I, 44. Phenomenon observed with the Rutherford-Geiger counter-tube under a relatively strong irradiation, I, 390.
- and Lesage, M., use of ordinary counters for counting rapidly successive phenomena, I, 104.
- Kwan, S. T. See Lyman, R. S.
- Kwan, T. See Horiuti, J.
- Kwiatkowski, H. See Gaddum, J. H.
- Kwiecinski, G. See Zawadzki, J.
- Kwintkiewiczówna, L. See Krause, A.
- Kwit, N. T. See Gold, H.
- Kyer, J. See Sladek, J.
- Kyker, G. C., and Bost, R. W., effect of temperature on the nitration of *p*-cymene; synthesis of 6-nitrocarvacrylamine, and derivatives, II, 500.
- Kylin, E., hypophysis implantation in treatment of leanness in delayed puberty, III, 46.
- and Dicker, E., rôle of hypophysis in total alopecia, III, 1045.
- and Koranyi, A., isoelectric point of human serum-globulin, III, 12.
- Kylin, E. See also Bennhold, H.
- Kyllingstad, O. S. See Raeder, M. G.
- Kynch, G. J. See Penney, W. G.
- Kyo, S., photodynamic effect of photocatalysts on retino-motor changes due to lights of different wave-length in the frog, III, 1043.
- Kyrieles, W., clinical and anatomical observations on retinitis albuminurica, III, 837.
- Kyropoulos, S., viscosity of non-polar liquids, I, 135.
- Kyu-sui, C., fate in the animal body of *N*-substituted amino-acids. I. Production of kynurenine and kynurenic acid from abrin in the rabbit. II. Effect of abrin on experimental anemia and on growth, III, 296.
- Kyzlink, V., variations in potassium contents of the ash of flax, III, 1108.
- L.
- Laar, J. A. W. van, importance of polarographic methods of investigation for colloid chemistry, I, 563.
- La Barre, J., [hormonal regulation of carbohydrate metabolism], III, 300. Insulin secretion during hyperfunction of acinar tissue of pancreas [effect of excretin], III, 582. Internal secretion of pancreas during exocrine hyperfunction, III, 1050.
- and Heerswynghe, J. van, sensibility to calcium of animals treated with digitalis, III, 506.
- and Loieq, R., resistance to insulin in guinea-pigs with experimental sarcomata, III, 477.
- See also Zunz, E.
- Labes, R., and Bergstermann, H., phenol-binding alkaloids and tissue respiration poisons, III, 187.
- Krauskopf, B., and Bergstermann, H., precipitation reactions of quinoline and quinolin imide with phenol substitution products, II, 528.
- Labocetta, L., mass of the first photon, I, 352. Simplified expression of the value of some complex atomic constants, I, 507.
- Laborey, F. See Lavollay, J.
- Labrecque, F. C., intravenous anaesthesia in obstetrics, III, 508.
- Laby, T. H., and Hopper, F. D., electronic charge, I, 237. Thermostat, I, 280.
- Lacassagne, A., appearance of mammary adenocarcinomata in male mice treated with diethylstilbæstrol, III, 265. Effect of thyrotropic hormone on production of adeno-carcinomata of the breast in mice, III, 677.
- and Raynaud, A., effects of long-continued injections of testosterone propionate in mouse, III, 983.
- and Rouyer, M., effect of imbibition on sensitivity of viper's venom to radium, III, 96.
- Schoen, Marcel, and Beraud, P., radioraces of yeast. II. Physiological characters of some radio races of a wine yeast, III, 941.
- and Wollman, E., comparative action of X-rays on the dysentery bacteriophages C16 and S13, III, 1014.
- See also Cotellet, (Mme.) S., and Wollman, E.
- Lacey, W. N. See Budenholzer, R. A., and Sage, B. H.

- Lachat, L. L., and Halvorson, H. A., effect of charcoal and length of storage on calcifying property of cod-liver, sardine (pilchard), and concentrated cod-liver oils, III, 76.
- Lacher, J. R. See Klstiakowsky, G. B.
- Laehmann, O., anatomy of the hind-limb of *Hamadryas pavianus*, III, 541.
- Lachnit, V., myeloblastic leukaemia, III, 959.
- and Walterskirchen, L., case of plasma cell leukemia, III, 227.
- and Zollner, S., therapeutic action of local application of cold on the heart, III, 456.
- Lachno, E. V., arginine content of various parts of the brain of different animals, III, 252.
- Lachs, H., and Mański, W., refractive index of cellulose acetate solutions, I, 258.
- Laekner, J. E., Wachtel, H., and Soskin, S., phenomena accompanying the menstrual cycle in normal women, III, 381.
- Lacoste, A. See Aubertin, E.
- Lacour, M. See Chiray, M.
- Lacourt, (Mlle.) A. See Wuyts, H.
- Ladell, W. S. S., effect of hydrogen-ion concentration of diluted serum on growth of tissues *in vitro*, III, 963.
- Ladenburg, K., Fernholz, E., and Wallis, K. S., separation of sterols by chromatographic adsorption, II, 61.
- Ladenburg, R., Kanner, M. H., Barschall, H. H., and Van Voorhis, C. C., uranium and thorium fission produced by fast neutrons of nearly homogeneous energy, I, 504.
- Ladewig, P., Herzberg's virus stain and Shope's cottontail rabbit papilloma, III, 208. Precipitation of protein fractions in solutions particularly poor in proteins, III, 869.
- Dessau, F., and Ottenstein, B., nitrogen content of active extracts of Shope's cottontail rabbit papilloma, III, 158.
- See also Ottenstein, B.
- LaDue, J. S., treatment of hæmatemesis, III, 841.
- Ladzińska, H. See Centnerszwer, M.
- Laer, P. H. van, magnetic and thermodynamical functions in the superconductive, intermediate, and normal states, I, 132.
- and Groenewold, H. J., relaxation connected with transition from the superconducting to the normal state, I, 408.
- and Keesom, W. H., reversibility of transition between the superconductive and the normal state, I, 66. Relaxation connected with transition from the superconductive to the normal state or vice versa in a constant external magnetic field, I, 66.
- Lafay, B. See Peyron, A.
- Laffitte, P., explosion wave in gas mixtures, I, 30.
- Elchardus, E., and Grandadam, P., nitride formation with magnesium and aluminium, I, 90.
- See also Freling, E., and Holtermann, C.
- Lafon, J. See Verger, P.
- Lafon, M., nitrogenous requirements; biometric and physiological analysis of lysine- and cystine-free diets in the rat and mouse, III, 992. Qualitative nitrogen requirements. II. *Drosophila melanogaster*, Meig, III, 1065.
- and Teissier, G., nutritional needs of the larva of *Tenebrio molitor*, III, 849.
- and Veillet, A., lysine deficiency and genital function, III, 145. Cystine deficiency and genital function, III, 145.
- La Forge, F. B. See Haller, H. L.
- La Forge, L., crystallography of tsumebite, I, 108.
- Lagatu, H., and Maume, L., does the nitrogen, phosphorus, and potassium content of the leaves of a vine bough differ with the load of fruit? III, 100. Effect of the nature of the graft on nitrogen, phosphorus, and potassium utilisation of the grafted vine, III, 1016.
- Lagemann, R. T. See Whitecomb, S. E.
- Lagen, J. B. See Soley, M. O., and Whitehead, R. W.
- Lagerev, S. P., and Abramov, M. M., velocity of hydrogenation of isomeric olefines, I, 329.
- and Schamschurin, A. A., addition of hydrogen chloride to propenylbenzene, II, 361.
- Lagerlof, H., secretin test of pancreatic function, III, 758.
- Lagrange, B., and Tchakirian, A., spectrographic determination of elements present in traces in calcareous algae (*Lithothamnium calcareum*), III, 949.
- Lahaye, H., variation in mass of very fast electrons, I, 51.
- Lahiri, D. C., use of non-specific substances in the production of tetanus and diphtheria antitoxin, III, 200. Anti-welchii serum for prevention and treatment of gas gangrene in man, III, 330. Utility of Ramon's flocculation test in the standardisation of tetanus antitoxin, III, 333. Effect of tryptic digestion on toxicity and antigenicity of the tetanus toxin broth, III, 945.
- Lahiry, N. L., and Sreenivasaya, M., adsorption of ascorbic acid by lead salts, I, 460.
- Lahn, G. See Hingsberg, K.
- Lahr, E. L., and Riddle, O., proliferation of crop-sac epithelium in incubating and in prolactin-injected pigeons studied with the colchicine method, III, 259.
- See also Bates, R. W.
- Laibach, F., inactivation of growth-promoting substances by light, III, 215.
- and Fischnich, O., relation between extensional growth and assimilation [in plants], III, 637.
- Laidlaw, R. W., Hamilton, M. A., and Brickner, R. M., occurrence of dissociated disturbances of paresthesia and kinesthesia, III, 569.
- Laidler, K. J., factors determining the velocity of reactions in solution; formation of quaternary ammonium salts, I, 31.
- See also Eyring, H.
- Laine, E. See Bizard, G.
- Lainé, P. See Kúrti, N.
- Laine, T., liberation of ammonia from zein in peptic hydrolysis, III, 518. Crystalline proteases, III, 518. Application of micro-methods in the analysis of zein. II., III, 1020.
- See also Arhimo, A. A., and Virtanen, A. I.
- Laird, D. G., and West, P. M., influence of bios on nodule bacteria; influence of crude bios preparations on acid production by strains of *Rhizobium trifolii*, III, 101.
- Laird, F. W., and Smith, A., determination of mercury with *s*-diphenylcarbazide, I, 40.
- Laird, S. M., sulphanilamide in climatic bubo, III, 305.
- Laisne, G., variations in osmotic pressure of tissue juice of *Fraxinus excelsior*, L., and of other plants during artificial drying, III, 798.
- Laitinen, H. A., and Kolthoff, I. M., study of diffusion processes by electrolysis with micro-electrodes, I, 605.
- See also Kolthoff, I. M., and Lingane, J. J.
- Laiwalla, M. C. See Shah, R. C.
- Lake, W. H. G., and Peat, S., conversion of *d*-glucose into *d*-idose, II, 408.
- See also Haworth, W. N.
- Lakedemonski, A. V. See Perschke, V. K.
- Lakhani, J. V., and Daroga, R. P., determination of parachors of inorganic salts in solutions and their structure. II. Lithium, sodium, and rubidium salts and atomic parachors of the above elements including cesium. III. Parachors of salts of magnesium, strontium, and barium and the atomic parachor of the above elements and radium, I, 129, 183.
- Lal, B. B., decomposition of hydrogen peroxide by potassium ferrocyanide. I., I, 619.
- Lal, J. B., chalkones. I. Chalkones derived from resacetophenone and its dimethyl ether, II, 550.
- Lal, K. B., and Krall, H., phenylthiocarbamides; triad -N-C-S-. VIII. Hector's base and its attempted synthesis. II, 256.
- Lal, K. N. See Singh, B. N.
- Lal, M. B. See Singh, B. N.
- Lal, R. B., Ahmad, B., and Roy, S. C., allyl isothiocyanate as an aetiological factor in epidemic dropsy, III, 161.
- See also Ahmad, B.
- Laland, P. See Nicolaysen, R.
- Lallemant, A., photo-electronic photography, I, 389.
- Lallemant, S., production of fowl strophosomes by means of colchicine, III, 643. Action of colchicine on chicken embryos at different stages of development, III, 888.
- See also AnceI, P.
- Lalli, A. See Stofa, G.
- Lamar, E. S., Stone, A. M., and Compton, K. T., positive column of the nitrogen arc at atmospheric pressure, I, 439.
- Lamar, J. K. See Moore, C. R.
- Lamb, A. B., interconversion of acido- and aquo-rhodium pentammines, I, 269.
- and Ohl, E. N., adsorption of gases by graphite. II., I, 195.
- Lamb, A. R., effect of malnutrition on pathogenesis of rat leprosy, III, 286.
- Lamb, I. D., and White, A. C., amidines and amidoximes with trypanocidal activity, II, 471.
- Lamb, W. E., jun., capture of neutrons by atoms in a crystal, I, 172. Deviation from the Coulomb law for a proton, I, 547.
- See also Wheeler, J. A.
- Lambert, A. See Cope, O.
- Lambert, B., and Borgars, D. J., accurate analysis of gaseous mixtures, I, 275.
- Lambert, D. H. See Sheppard, S. E.
- Lambert, E. W. See Hickinbottom, W. J.
- Lambert, J. See Moureau, P.
- Lambert, P., and Lecomte, J., infra-red absorption spectra of aliphatic and aromatic carbon compounds. II., I, 119. Absorption of acetaldehyde in the infra-red spectrum, I, 240. Infra-red absorption spectra of high mol. wt. hydrocarbons and of heterocyclic compounds, I, 300.

- Lambert, P. P., and Cambier, P., deposition of dyes in a human polycystic kidney, III, 275.
- and Muller, P., pathology of the polycystic kidney, III, 1060.
- Lambert, R. See Schube, P. G.
- Lambert, R. H. See Sheppard, S. E.
- Lambertini, G., epithelial, peri-infundibular layer and glandular fibres of the hypothalamic infundibulum of mammals and man, III, 136.
- Lambertson, A. H. See Patterson, T. S., and Ruzicka, L.
- Lambie, D. A., analytical chemistry of tungsten, I, 490.
- Lambillon, J., and Lejeune, A., chromatophore expansion as functional test for posterior pituitary, III, 48.
- Lambin, S. See Régnier, J.
- Lambrechts, A., ultra-violet spectrography, I, 339.
- See also Dubois, L.
- Lambret, O., and Driessens, J., accumulation of chorides in experimental intestinal obstruction, III, 270.
- Lambrinudi, C., feet of industrial worker, III, 619.
- La Mer, V. K., and Hochberg, S., hydrogen and deuterium exchange between nitramide and water, I, 569.
- and Noonan, E., thermodynamics of strong electrolytes in protium-deuterium oxide mixtures. II. Potassium chloride, I, 471.
- See also Amis, E. S., Maron, S. H., and Noonan, E.
- Lamey, C. A., metamorphic phenomena produced by gabbroic intrusion, I, 284.
- Lamm, O., electrical method of measuring the diffusion of salts, I, 525.
- Lamm, S. S., postvaccinal encephalomyelitis, III, 1101.
- Lamont, J. A. See Macklin, M. T.
- Lamoreux, W. F., and Hutt, F. B., breed differences in resistance to deficiency of vitamin-B₁ in the fowl, III, 1070.
- Lampe, W., and Macierewicz, Z., dicinnamoylmethane series. I. Synthesis of three isomeric dinitro-derivatives, II, 266.
- Lampert, H., significance of syneresis in the origin and treatment of embolus- and stone-diseases, III, 195.
- Lampf, H. See Feitelberg, S.
- Lampland, C. O. See Adel, A.
- Lamprecht, A. E. See Roth, W. A.
- Lampson, C. W., Mueller, D. W., and Barton, H. A., neutron-proton interaction, I, 56.
- Lamy, M., Kissel, P., and Pierquin, L., bone marrow damage by benzene, III, 810.
- Lanari, A., action of prostigmine in myasthenia gravis, III, 88. Effect of creatine on blood-sugar of frogs, III, 356. Pharmacological study of myotonia, III, 567.
- Lancefield, R. C. See Hirst, G. K.
- Lancellotti, G., effect of vitamin-C on a transplantable tumour, III, 763.
- Lánczos, A., production of tolerance to vitamin deficiency, III, 602. Action of thyrotropic hormone on metabolism of cold-blooded animals, III, 839. Cervical sympathetic ganglion and pupil, III, 969.
- Landau, E., apparatus for dehydration and imbedding *in vacuo* without use of chemical substances, III, 446.
- Landau, G. See Maxia, C.
- Landau, H. G., ignition of gases by local sources. II. Ellipsoid sources, I, 202.
- Landau, R., ovarian and tubal portions of the genital tract in *Hemicentetes*, III, 738.
- Landauer, W., Pfeiffer, C. A., Gardner, W. U., and Man, E. B., hyper-calci-fication, -calcaemia, and -lipæmia in chickens following administration of oestrogens, III, 1052.
- Landay, L. H. See Peshkin, M. M.
- Landé, A., transitions between levels spaced almost continuously, I, 56. Sommerfeld's fine structure constant and Born's reciprocity, I, 595. Structure of electric particles and the number 137, I, 595.
- Lande, H., present status of protamine-insulin, III, 910.
- Lande, K. E., examination of effusions in tumour cases, III, 700.
- Landgrebe, F. W., maintenance of reproductive activity in *Xenopus laevis* for pregnancy diagnosis, III, 1055.
- Landis, C. See Goldstein, K.
- Landis, E. M., capillaries of the skin, III, 20.
- Landis, Q. See Beckmann, C. O.
- Landmann, H. R., internal secretion and orthopaedic surgery, III, 839.
- Landor, J. V., vitamin-B₁₂ deficiency, III, 766.
- Landra, G., duplicated spinal ganglia in Hungarians, III, 129.
- Lands, A. M. See Cutting, R. A.
- Landsberg, G. S., intermolecular forces and Raman effect, I, 240.
- Landshoff, R., influence of chemical binding and crystal structure on X-ray absorption edges, I, 290. Quantum-mechanical calculation of the lattice energy of sodium chloride, I, 304.
- Landsteiner, K., and Chase, M. W., group-specific A substances. III. The substance in commercial pepsin, III, 198.
- and Di Somma, A. A., sensitisation of animals with simple chemical compounds. V. Sensitisation to diazo-methane and mustard oil, III, 92.
- Rostenberg, A., jun., and Sulzberger, M. B., individual differences in susceptibility to eczematous sensitisation with simple chemical substances, III, 618.
- Landt, H. See Benjamin, J. E.
- Lane, A. C., isotopes of uranium and lead, I, 3.
- See also Evans, R. D.
- Lane, C. E., aberrant ovarian follicles in the immature rat, III, 585.
- Lane, C. G., occupational dermatoses, III, 317. Jaundice occurring during treatment of syphilis, III, 1088.
- Lane, C. W., and Smith, M. G., cutaneous manifestations of chronic (idiopathic) lipoidosis (Hand-Schueller-Christian disease), III, 1077.
- Lane, R. L. See Thimann, K. V.
- Lanford, C. S., effect of orange juice on calcium assimilation, III, 992.
- and Sherman, H. C., effect of dietary calcium on the calcium content of the body, III, 72.
- See also Sherman, H. C.
- Lanfranchi, F., cerebrosides in various animals, III, 251.
- Lang, A., tryptophan content of tumours, III, 158. Importance of tumour lipins, III, 848.
- and Rosenbohm, A., lipins of tumour transplants, III, 280.
- Lang, E. H. See Reiner, L.
- Lang, F. J., bone changes in chronic fluorine poisoning, III, 934.
- Lang, Karl. See Koster, W.
- Lang, Konrad, nickel salts of amino-acids: their solubility, II, 470. Porphyrinuria at high altitude, III, 915. Excretion of glyoxalalyl compounds and intermediary metabolism of amino-acids at high altitude, III, 925. Simple distillation apparatus for chemical micro-methods, III, 953.
- Lang, R. (Wien). See Schmid, L.
- Lang, Rudolf, volumetric determination of ferrocyanide and arsenious acid in presence of each other, I, 100.
- Lang, R. J., regularities in the third spectrum of thorium, I, 502.
- Lang, S., increase of red cell count after exercise, III, 5.
- Lange, B., photo-electric colorimetry and the application of selenium photo-elements, I, 43.
- Lange, Erich, variation of electrochemical potential in the cuprous oxide rectifier, I, 302. Reference points and signs in chemical thermodynamics, I, 473.
- and Nagel, K., thermodynamics of a two-electrode system with two unretarded ionic transitions in the absence of a current, I, 29. Thermodynamics of a two-electrode system with retarded ionic transitions in the absence of a current, I, 83.
- See also Heiler, H.
- Lange, K. H., changes in genital tract of white rat, III, 756.
- Lange, N. A., Chisholm, D. C., and Szabo, J. L., quinoxalines. VIII. Methyl esters of 1:3-dimethylbenzoylencarboxamide-5-carboxylic acid and 2:4-dimethoxyquinazoline-5-carboxylic acid, II, 522.
- Lange, P. W., comparison between Bi₂Te₃ and Bi₂Te₂S₃, I, 244.
- Lange, W. See Wittig, G.
- Langecker, H., pharmacological and therapeutic significance of purification of plant and animal products, III, 867.
- Langedijk, S. L. See Wibaut, J. P.
- Langefeld, H. See Hoen, E.
- Langeltüddeke, A., cardiazol fits in diagnosis of epilepsy, III, 250.
- Langen, D., erythema after solar and spatial radiation, III, 317.
- Langenbeck, W., and Weissenborn, K., organic catalysts. XX. Synthetic carboxylases. VI., II, 283.
- Wolthersdorf, W., and Blachnitzky, H., preparation of putrescine from butadiene, II, 248.
- Langendijk, W. See Brinkman, H.
- Langendorf, R., electrocardiogram in auricular infarction, III, 820.
- and Pick, A., chest leads in diagnosis of myocardial infarcts, III, 17. Electrocardiogram in acute nephritis, III, 359.
- See also Hahn, L., and Winternitz, M.
- Langendorff, H., Graf, L., and Graf, J., biological determination of dose distribution during X-ray therapy at 200 and 400 kv., III, 318.
- and Langendorff, action of ultra-short waves on inoculated tumours, III, 847.
- Langendorff, M. See Langendorff, H.
- Langenecker, H., and Lewit, K., detoxication of cocaine, percaïne, and atropine, III, 1004.

- Langer, A., centrifuging arrangement for gravimetric micro-determinations, I, 46. Specific test for mercury on aluminium, I, 99. Red coloration of ferric salts with glycine. IV., I, 199. Acridine complexes in micro-analysis, I, 218.
- and Spindrich, J., physical and biological comparison between X-ray apparatus fed by direct or alternating current, III, 784.
- See also Dubsky, J. V.
- Langer, L. M., Mitchell, A. C. G., and McDaniel, P. W., coincidences between β - and γ -rays in indium, I, 546. Coincidences between β - and γ -rays in manganese, I, 591.
- Langfeldt, E., glycogen formation after administration of ascorbic acid, III, 167.
- Langham, W. See Gilman, H.
- Langley, G. F. See Biddle, E.
- Langlois, J., and Morin, C., determination of arsenic by hypophosphites, I, 277.
- Langmesser, P. See Klemm, W.
- Langmuir, D. B. See Malter, L.
- Langmuir, I., role of attractive and repulsive forces in the formation of tactoids, thixotropic gels, protein crystals, and coacervates, I, 77. Repulsive forces between charged surfaces in water, and the cause of the Jones-Ray effect, I, 140. Molecular layers, I, 255. Properties and structure of protein films, I, 316. Structure of proteins, I, 459; II, 293.
- and Schaefer, V. J., salted-out protein films, I, 23.
- and Winch, D. M., structure of insulin, I, 459. Nature of the cyclol bond, II, 192.
- Langner, P. H., and Kern, R. A., immunology of hay fever, III, 192.
- See also Kern, R. A.
- Langsdorf, A., jun., continuously sensitive cloud chamber, I, 340. Fission products of thorium, I, 505.
- Langsteiner, F., thallium poisoning, III, 1088.
- Langston, W. C., Darby, W. J., Shukers, C. F., and Day, P. L., nutritional cytopenia (vitamin-M deficiency) in the monkey, III, 498.
- See also Shukers, C. F.
- Langstroth, G. O., and Talbot, N. B., absorption spectra of the compounds formed by androsterone and testosterone in the *m*-dinitrobenzene reaction, II, 378. Behaviour of dehydroisandrosterone and androsterone in the *m*-dinitrobenzene reaction, II, 481.
- Langweiler, H., hydrodynamic theory of detonation, I, 30.
- Langworthy, O. R., vesical abnormalities associated with the Parkinsonian syndrome, III, 246.
- Hesser, P. H., and Kolb, L. C., physiological study of the cerebral cortex of the hair seal (*Phoca vitulina*), III, 373.
- and Kolb, L. C., histological changes in the muscle of the urinary bladder following injury of the peripheral innervation, III, 486.
- and Rosenberg, S. J., control by central nervous system of rectal smooth muscle, III, 1036.
- See also Brack, C. B.
- Lanjouw, O., sp. gr. meter for flowing liquids, I, 390.
- Lanke, L. S., determination of ascorbic acid in strongly coloured fruit, III, 496.
- Lankosz, J. See Maleczynski, S.
- Lanning, F. C., and Lind, S. C., chemical action of α -particles from radon on aqueous solutions, I, 90.
- Lanning, W. C., and Davidson, A. W., Hittorf transference numbers of sodium and ammonium acetates in anhydrous acetic acid, I, 147.
- Lansbury, J., and Hughes, J., oestrin excretion in psychotic patients, III, 981.
- Lantz, N. See Portes, L.
- Lantz, R., rôle of sulphuric acid in reactions brought about in its presence, I, 211. Colorimetric method for detection of small quantities of nitric acid, I, 214. Nitration of naphthalenesulphonic acids. I and II., II, 148.
- Lanz, H., jun. See Linderström-Lang, K.
- Lanzing, J. C., determination of vitamin-A and carotenoid contents in 1—2 c.c. of blood, III, 494.
- Lapenna, M., influence of wave-length on irradiation of biological objects, III, 937.
- Lapicque, L., far-fetched theories of the functional rôle of acetylcholine, III, 471. Curarisation and chronaxie, III, 548. Relation between fibre-size and speed of conduction in nerve, III, 568. Reciprocal relationships between chronaxie, speed of conduction, and thickness of myelinated nerve fibres, III, 827. Anatomy and physiology of the cerebello-spinal pathway, III, 970. Function of cerebellum, III, 970.
- and Lapicque, M., influence of the condition of the electrodes on accommodation [in nerve], III, 244. Relation between chronaxie and accommodation, III, 465. Relation between polarity of spinal cord and peripheral subordination, III, 569. Effect of constant current on reflex excitability of spinal cord, III, 969.
- Lapicque, M., modification of chronaxie of motor nerves following sympathectomy, III, 471.
- See also Lapicque, L.
- Lapiere, S., and De Weerd, W., bone marrow in mycosis fungoides, III, 549.
- Lapin, J. See Cohen, P.
- Lapiné, M., preparation of γ -hydroxy- α -phenylbutyric acid, II, 158.
- Lapkin, I. I., naphthenic acids (from Grosny petroleum). I., II, 547.
- Laporte, A., and Brocard, H., serum flocculation reactions in presence of an alcoholic bacterial extract in *B. funduliformis* infection, III, 875.
- Laporte, M., auto-absorption of the continuous spectrum emitted by a xenon tube excited to give white light, I, 440.
- Laporte, O., elastic scattering of Yukawa particles. I., I, 55.
- and Mack, J. E., spectral series in neutral tungsten, W 1, and limitations on the possibility of determining spectroscopic ionisation potentials, I, 290.
- See also Mack, J. E.
- Laporte, R., toxicity of *B. paratuberculosis*, III, 1012.
- Lapschin, M. I., application of conductometric titration to acidimetry, I, 37.
- Laqueur, E. See Jacobs, J. D.
- Laqueur, G. See Mollendorff, W. von.
- Larchar, A. W. See Reid, E. E.
- Larcomb, J. W., phenylketonuria and the congenitally deaf, III, 574.
- Large, R. G., and Brocklesby, H. N., hypoglycemic substance from roots of the devil's club (*Fatsia horrida*), III, 184.
- Larionov, J., Novikova-Minasch, O. I., and Seidel, A., fluorescence and absorption of praseodymium salt solutions, I, 241.
- See also Seidel, A.
- Larizza, P., blood-sulphur in hepatic disease, III, 986.
- Lark-Horovitz, K., Risser, J. R., and Smith, R. N., nuclear excitation of indium with α -particles, I, 350.
- Laroche, G., Saidman, Bartoszek, T., and Boismoreau, skin temperature following intradermal adrenaline injection, III, 44.
- Simonnet, H., and Bompard, E., effect of testosterone on urinary excretion of gonadotropic factors, III, 384. Urinary elimination of oestrogenic substances after injection of sex hormones, III, 687.
- La Rotonda, C., and Petrosini, G., chemical and physico-chemical analysis of sulphuretted water of Mariori (Salerno), I, 225.
- Larsen, C. E., sodium sulphanilysulphanilate in canine distemper, III, 179.
- Larsen, E. S., and Buie, B. F., potash analcime and pseudoleucite from the Highwood Mountains of Montana, I, 110.
- and Switzer, G., obsidian-like rock formed from the melting of a granodiorite, I, 496.
- Larsen, P., skototenin, a new growth-promoting substance in higher plants, III, 1018.
- Larsén, T., refraction and dispersion of HCl, HBr, and H₂S and the isotopic heavy molecules DCl, DBr, and D₂S, I, 127.
- Larsen, V., vasoconstriction and analeptic effect of sympathomimetic amines, III, 84.
- Larson, E., polymethylenebisthionylacetic acids, II, 243.
- Larson, H. W., Chambers, W. H., Blatherwick, N. R., Ewing, M. E., and Sawyer, S. D., metabolism of *d*- and *l*-xylulose in the depancreatised dog, III, 925.
- Larson, P. S. See Cutting, R. A.
- Larson, R. G., and Hunt, H., molecular forces and solvent power, I, 315.
- Larson, W. D., and Tomiscek, W. J., activity coefficients of the undissociated part of weak acids. I. Acetic acid in potassium acetate solutions, I, 144.
- Larson, W. P., Bieter, R. N., and Levine, M., protective action of sulphapyridine in rabbits infected with pneumococci, III, 1081.
- Bieter, R. N., Levine, M., and Hoyt, R. E., inhibitory action of peptone on sulphapyridine adsorption, III, 1081.
- See also Bieter, R. N.
- Larsson, A., and Myrback, K., determination of products of intermediary metabolism in avitaminosis-B₁₂, III, 609.
- Larsson, H., chemistry and physiology of male sexual hormones (androgens), III, 754.
- See also Josephson, B.
- Larsson, Y., number of nerve fibres in spinal nerves of *Macacus rhesus*, III, 245.
- Lasagni, E. See Illari, G.
- Lassausse, E., Frocrain, L., and Pollès, C., deviation of the complement, and its application to the Bordet-Wassermann reaction, III, 1107.

- Lasch, *F.*, crural ulcers in pernicious anemia, III, 548.
- Laschakov, *L. M.*, *p-v-T* relations and an equation of state for unsaturated vapour of methyl alcohol, I, 604.
- Laschko, *N. F.*, and Petrenko, *B. G.*, state of atoms in plastically deformed metals, I, 408.
- See also Boruschko, *M. S.*
- Laser, *H.*, and Rothschild, (*Lord*), metabolism of the eggs of *Psammochinus miliaris* during fertilisation reaction, III, 498.
- Lasher, *E. P.* See Glenn, *F.*
- Lashley, *K. S.*, mechanism of vision: functioning of small remnants of visual cortex, III, 830.
- Laskowski, *L.*, and Burk, *R. E.*, probable length of hydrocarbon chains, I, 455.
- Lasnitzki, *A.*, radioactivity of potassium in tumour tissue, III, 699.
- Lasocka, *D.* See Mystkowski, *E. M.*
- Lasri, (*Mlle.*) *R.* See Carrière, *E.*
- Lassek, *A. M.*, and Rasmussen, *G. L.*, quantitative study of the new-born and adult spinal cords of man, III, 370. Regional volumetric study of grey and white matter of human prenatal spinal cord, III, 829.
- Lassen, *H.*, prostatectomy and rejuvenation, III, 482.
- Lassette, *E. N.*, and Dickinson, *R. G.*, comparative method of measuring vapour pressure lowering with application to solutions of phenol in benzene, I, 145.
- See also Wolfrom, *M. L.*
- Last, *J. H.* See Roby, *C.*
- Laszkiewicz, *A.*, structure of syngenite, I, 500.
- László, *B.* See Erdos, *J.*
- Latarjet, *R.*, Jullien, *A.*, and Popier, *A.*, permeability of the bladder of the frog to eosin, III, 694.
- See also Jullien, *A.*
- Lataste, *C.*, Farinaud, *E.*, and Nguyen-Van-Lien, distribution of injected quinaerin in the blood, III, 714. Determination of atebirin in blood, III, 743. Distribution of quinaerin between blood corpuscles and plasma, III, 928. Determination of quinaerin [atebirin] in blood, III, 928.
- See also Farinaud, *E.*, and Querido, *A.*
- Latchford, *W. B.* See Carleton, *B. H.*
- Lathrop, *C.* See Dermer, *O. C.*
- Latif, *I.*, etiological factors in pathology of stammering, III, 670.
- Latimer, *W. M.*, Pitzer, *K. S.*, and Slansky, *C. M.*, free energy of hydration of gaseous ions, and the absolute potential of the normal calomel electrode, I, 202.
- and Zimmermann, *H. W.*, thermodynamics of hyponitrous acid, I, 474.
- See also Zimmermann, *H. W.*
- Latishev, *G.* See Alichanov, *A. I.*
- La Tour, *D.* See Giraudo-Costa, *E.*
- La Tour, *F. D.*, dilatation and polymorphism in fatty acids, I, 191. Diffraction of X-rays by a crystalline powder sprinkled on an immobile plane surface, I, 491.
- Latowsky, *L. W.*, effects on health of gases produced by the electric arc, III, 1006.
- Latta, *J. S.*, and Davis, *J. Z.*, effect of thyroxine on growth of fibroblasts *in vitro*, III, 40.
- Lattes, *F.*, intestinal absorption of glucose and xylose in vitamin-*B₁*-deficient rats, III, 74. Effect of large doses of testosterone on the testes, III, 142.
- Latven, *A. R.*, and Molitor, *H.*, comparison of the toxic, hypnotic, and irritating properties of eight organic solvents, III, 416.
- Latzel, *M.*, relative duration of electric systole in a hot bath, III, 455.
- Laub, *R.*, familial occurrence of leukaemia, III, 349.
- Laubengayer, *A. W.*, and Engle, *H. R.*, sesquioxide and hydroxides of gallium, I, 381.
- Lauber, *A.* See Rheinboldt, *H.*
- Lauber, *H. J.*, and Bersin, *T.*, action of water-soluble vitamins on liver-glycogen during anaesthesia, III, 615. Effect of fat-soluble vitamins on glycogen content of liver during ether anaesthesia, III, 758. Failure of l-ascorbic acid treatment in scurvy, III, 768.
- Hildebrand, *E.*, and Schocke, *H.*, therapeutic action of carcinogenic benzenes, III, 779. Influence of water-soluble vitamins on formation and growth of malignant tumours, III, 847.
- and Rosenfeld, *W.*, vitamin-C content of organs during wound healing, III, 168.
- Schocke, *H.*, and Bersin, *T.*, action of water-soluble vitamins on cancer, III, 70.
- Laubinger, *W.*, argentaffine fibres of fat tissue and their function, III, 225.
- Laubry, *C.*, Routier, *D.*, and Bourrain, *Y.*, oxygen consumption in heart disease, III, 16.
- Soulie, *P.*, and De Balzac, *R. H.*, gastroduaphragmatic syndrome in coronary disease, III, 20.
- Soulie, *P.*, and Laubry, *P.*, diagnostic value of an electrocardiographic rapid deflexion following the S wave, III, 745.
- Laubry, *P.* See Deglande, *L.*, and Laubry, *C.*
- Laucius, *J. F.* See Whitmore, *F. C.*
- Laucker, *T. V.* See Timmermans, *J.*
- Lauda, *E.*, hyperpyrexial treatment of chronic colitis, III, 512. Treatment of colitis, III, 593.
- Laude, *G.*, hydrolysis of guanidine by boiling potassium hydroxide solution, II, 410. Curves showing formation of ammonia by boiling alkaline solutions of guanidine and proteins, II, 410.
- Lauder, *I.* See Herbert, *J. B. M.*
- Laué, *M. von*, ordering and transformations in condensed phases, I, 11.
- Lauener, *P.*, goitre in school children before and after use of iodised salt, III, 679.
- Lauer, *N. V.*, effect of decortication on course of inflammatory processes in various classes of animals, III, 373.
- Lauer, *W. M.*, Klug, *H. P.*, and Harrison, *S. A.*, alleged isomerism of α - and β -p-azophenol, II, 542.
- and Sunde, *C. J.*, structure and mechanism of formation of the Bandrowski base, II, 57.
- Lauerman, *E. I.* See Kapitza, *P. L.*
- Lauersen, *F.*, methods for clinical investigation of intermediary metabolism; distillation apparatus for the determination of acetone, acetaldehyde, β -hydroxybutyric and lactic acid, total or residual nitrogen, urea, amino-acid nitrogen, and ammonia, III, 540.
- and Wahlander, *H.*, determination of lactic acid in small amounts of blood, III, 13.
- Lauffer, *M. A.*, optical properties of solutions of tobacco-mosaic virus protein, III, 96. Viscosity of tobacco-mosaic virus protein solutions, III, 336. Electro-optical effect in viruses, III, 1015.
- and Gortner, *R. A.*, electrokinetics. XXI. Electrokinetic theory; streaming potential and the electro-osmotic counter-effect, I, 418.
- See also Loring, *H. S.*, and Stanley, *W. M.*
- Laug, *E. P.*, Calvery, *H. O.*, Morris, *H. J.*, and Woodard, *G.*, toxicology of glycols and derivatives, III, 780.
- and Morris, *H. P.*, effect of lead on rats fed diets containing lead arsenate and lead acetate, III, 413.
- See also Calvery, *H. O.*, Grant, *R. L.*, and Morris, *H. P.*
- Laugier, *H.* See Belluc, *S.*
- Laugier, *P.* See Thivolle, *L.*
- Laur, *C. M.*, action of colchicine on cellular development, III, 643.
- Laurence, *C. H.* See Earl, *J. C.*
- Laurent, *P.*, physico-chemical study of reactions in organic solution; use of the specific inductive capacity, I, 26. Poisoning caused by the processional caterpillar (*Thaumetoepea pythiocampa*, Fabricius), III, 510.
- Laurent-Gérard, *J. P.*, and Welti, *H.*, effect of subtotal thyroidectomy on sexual function and oestron excretion, III, 679.
- Laurie, *J.* See Dunlop, *H.*
- Lauritsen, *C. C.* See Gaertner, *E. R.*, and McLean, *W. B.*
- Lauritzen, *M.*, observations on high-carbohydrate diet with and without insulin for diabetics, III, 997.
- Lausch, *G.*, oligodynamic action of silver in antiserum, III, 337.
- Lauson, *H.*, Golden, *J. B.*, and Sevringhaus, *E. L.*, gonadotropic content of hypophysis throughout life cycle of normal female rat, III, 677. Rate of increase in hypophyseal gonadotropic content following ovariectomy in the rat, with observations on gland weights, III, 905.
- Heller, *C. G.*, Golden, *J. B.*, and Sevringhaus, *E. L.*, immature rat uterus in the assay of oestrogenic substances, and a comparison of oestradiol, oestrone, and oestriol, III, 263.
- Heller, *C. G.*, and Sevringhaus, *E. L.*, inadequacies of oestradiol substitution in ovariectomised albino rats, III, 57.
- Laustsen, *O.* See Winge, *O.*
- Lauter, *W. M.*, and Griggs, *O. J.*, chemistry and physiology of venom of the honey bee (*Apis mellifica*), III, 1062.
- Lautié, *R.*, heats of formation, I, 147. Heats of formation and hydration of ions, I, 201. Classification and correspondence of the chemical elements and their compounds, I, 292. Aqueous solutions of electrolytes, I, 411. Molybdenum, I, 484. At. wt. of the natural elements and their isotopes, I, 503.
- Lautsch, *W.* See Freudenberg, *K.*
- Laval, *J.*, scattering of X-rays by crystals away from directions of selective reflexion, I, 348. Vitamin therapy in ophthalmic practice, III, 675.
- See also Mauguin, *C.*
- Laval, *P.* See Besredka, *A.*
- Lavaud, *J.* See Mouriquand, *G.*
- Laverne, *H.* See Caroli, *J.*

- Laves, F., comparison of volume and [interatomic] distance contractions in intermetallic compounds, I, 17. Transition between organisation and disorganisation in ionic crystals, I, 131. Crystallography of alloys, I, 137. Constitution of magnesium-zinc alloys, I, 465.
- Laves, W., action of phosphorylated sugar in adrenalectomised animals, III, 912.
- Lavietes, P. H. See Bruckner, W. J.
- Lavin, E. See Worrall, D. E.
- Lavin, G. I., Loring, H. S., and Stanley, W. M., ultra-violet absorption spectra of latent mosaic and ring-spot viruses and of their nucleic acid and protein components, III, 1105.
- See also Dobriner, K., Fruton, J. S., and Stern, K. G.
- Lavollay, J., and Laborey, F., definition of the coefficient of action of magnesium towards *Aspergillus niger*; variation with composition of medium, III, 791. Identification of lactoflavin produced by *Aspergillus niger*, V. Tgh., partly deprived of magnesium, III, 791.
- Law, L. W., effects of chemicals on lethal mutation rate in *Drosophila melanogaster*, III, 443. Tests for eye-colour hormones of *Drosophila* in other insects, III, 971.
- Lawe, T. See Sturrock, M. G.
- Lawkowicz, W., *Bartonella muris* and its cultivation *in vitro*, III, 524.
- See also Anigstein, L.
- Lawrance, (Miss) A. M., production of ^6Li by bombardment of boron with neutrons, I, 546.
- Lawrence, A. S. C., peptisation and complex formation in non-aqueous soap solutions, I, 369.
- Lawrence, E. O., performance of the 60-inch cyclotron at the University of California, I, 538.
- See also Hahn, P. F.
- Lawrence, J. H., and Scott, K. G., comparative metabolism of phosphorus in normal and lymphomatous animals, III, 1079.
- See also Jones, H. B., and Tuttle, L. W.
- Lawrence, J. S., Pearce, H. E., and Mider, G. B., effect of experimental neutropenia on healing of wounds, III, 812.
- Lawrence, R. A., origin of the Sweetwater, Tennessee, barite deposits, I, 499.
- Lawrence, R. D., treatment of insulin cases by one daily injection, III, 50. Value of zinc-protamine-insulin in treatment, III, 50. Protamine-zinc-insulin in diabetes, III, 911.
- Lawrence, W. J. C., Price, J. R., Robinson, (Lady), and Robinson, (Sir) R., distribution of anthocyanins in flowers, fruits, and leaves, III, 952.
- Lawrie, R. S. See Howkins, J.
- Lawson, A., and Eustice, (Miss) E. D., marrubin, the bitter principle of horehound (*Marrubium vulgare*), II, 273.
- Lawson, A. W., and Scheib, R., variation of the adiabatic elastic constants of polycrystalline ammonium chloride with temperature for 200–273° K., I, 460.
- Lawson, E. J. See Marker, R. E., and Suter, C. M.
- Lawson, H., and Holt, J. P., differential manometer method for measurement of blood flow, III, 562.
- See also Clay, H. L., and Gray, L. A.
- Lawson, J. See Wertheimer, D.
- Lawson, J. L., β -ray spectra of phosphorus, sodium, and cobalt, I, 505.
- See also Cork, J. M.
- Lawson, W. See Campbell, N. R., and Dodds, E. C.
- Lawton, J. H. T. See Plimmer, R. H. A.
- Laxa, O., stinking rosy milk, III, 329.
- Layani, F., Goutner, and Gascon, successful treatment of juvenile case of Cushing's syndrome by hypophyseal radiotherapy, III, 1045.
- See also Duvoir, M.
- Laymon, C. W., and Cumming, H., sensitiveness of skin to X-rays following ingestion of arsenic, III, 1088.
- Lazard, A. See Pontecorvo, B.
- Lazarev, A. P. See Maximov, V. I.
- Lazarev, A. I., destruction of furfuraldehyde in presence of mineral acids, II, 383.
- Lazarević, M., Jurišić, P. J., and Ilić, Z., kinetics of anatoxin formation, III, 330.
- Lazier, E. L., glass and rubber laboratory pump, I, 391.
- Łazniewski, M., microcalorimetric studies of anomalous heat effects, I, 266.
- Lazorthes, G., and Lhez, A., tubercle of Bouisson, III, 223.
- Lazzell, C. L. See Ashburn, H. G.
- Lea, C. H. See Hilditch, T. P.
- Leach, E. H., new stain for mucin, III, 1.
- Fat staining with Sudan-black B, III, 1.
- Leader, G. R. See Glockler, G.
- Leaf, C. W., and Knoll, A., laboratory flotation cell; small pneumatic cell of all-glass construction, I, 533.
- League of Nations, vitamin standardisation; committee report, III, 284.
- Leal, A. M. See Villela, G. G.
- Leans, W. N. See Hulgard, E. R.
- Leary, T., vascularisation of atherosclerotic lesions, III, 123.
- Lease, E. J., Lease, J. G., Steenbock, H., and Baumann, C. A., biological value of carotene in various fats, III, 493.
- Lease, J. G., Weber, Janet, and Steenbock, H., destruction of vitamin-A by rancid fats, III, 399.
- and Steenbock, H., diet and rate of depletion of hepatic vitamin-A, III, 493.
- Lease, J. G. See Lease, E. J.
- Leathem, J. H., and Morrell, J. A., induction of mating in the dog with pregnancy urine extract, III, 588.
- See also Starkey, W. F.
- Leathers, W. S., preventive medicine, III, 315.
- Leathes, J. B., and Mellanby, J., thrombokinase from brain, III, 892. Effect of lecithin on thrombokinase of daboia venom and of brain extracts, III, 892.
- Le Beau, D. S. See Hauser, E. A.
- Le Beau, J., and Bonvallet, M., arterial hypertension in production of acute cerebral oedema, III, 457.
- Lebeau, P. See Delépine, M.
- Lebedeva, A. I. See Favorski, A. E., and Freidlin, L. C.
- Lebedinski, V. F., and Balitzkaja, N. A., new series of tervalent iridium amines, I, 94.
- and Fedorov, I. A., compounds of rhodium with dimethylglyoxime, I, 93. Compounds of iridium with dimethylglyoxime, I, 93.
- Lebel, H. See Schultzer, P.
- Lebenzon, E. G., atypical mitoses caused by carcinogenic hydrocarbons in tissue cultures, III, 281. Action of large doses of 1:2:5:6-dibenzanthracene on growth and carbohydrate metabolism of tissue cultures, III, 281.
- Leberknight, C. E., and Lustman, B., optical investigation of oxide films on metals, I, 556.
- Le Berre, M., micro-determination of reducing sugars in body-fluids (blood, spinal fluid), III, 953.
- Leblois, C. See Bonnet, H.
- Leblond, C. P., and Gardner, W. U., distribution of vitamin-C in the adrenal gland of mouse; nature of X zone, III, 681.
- and Segal, G., effect of colchicine on adrenals and lymph glands, III, 91. Effect of toxic agents on the thymus in the adrenalectomised animal, III, 475.
- Thoia, N. van, and Segal, G., fatty infiltration of liver in the alarm reaction, III, 914.
- See also Giroud, A., Randoin, L., and Segal, G.
- Le Boiteux, H., and Te-Tchao, O., law of distribution of mobilities of large ions, I, 51.
- See also Te-Tchao, O.
- Lebon, J., and Manceaux, A., anaemia of chronic malaria, III, 811. Anaemia of acute malaria, III, 811.
- Le Bourgeois, J., polymorphism of lead [mon]oxide, I, 308.
- Le Breton, R. See Griffon, H.
- Lechner, R., utilisation of pentoses in biological synthesis of protein. III. and IV. Propagation of *Torula utilis* in xylose and xylose-glucose mixtures, III, 521, 790.
- and Illig, R., utilisation of pentoses in biological synthesis of protein. I. Analytical methods for use in formulating pentose balances. II. Cultivation of *Torula utilis* in synthetic and technical media, III, 325, 501.
- See also Fink, H.
- Le Chuiton, F., Bideau, J., Soubigou, X., and Fauconnier, J., production of sera agglutinating the O- and H-antigens of *B. typhosus* and *B. paratyphosus* by inoculating rabbits, III, 1013. Effect of olive oil on disappearance of antigen-H of the typhoid group on mixing with the living organisms, III, 1014.
- Le Clerc, G., catalytic activity of cubic iron sesquioxide in the synthesis of hydrocarbons by hydrogenation of carbon monoxide at atmospheric pressure, I, 151.
- and Lefebvre, H., comparison of the catalytic activities of the two allotropic forms of nickel, I, 479.
- and Michel, A., preparation and properties of the hexagonal form of nickel, I, 428.
- Lecoin, M., and Zlotowski, I., micro-calorimetric measurement of the mean energy of disintegration of radium-E, I, 591.
- See also Perey, (Mlle.) M.
- Le Compte, P. M. See Powers, G. F.
- Lecomte, J., infra-red absorption spectra of monosubstituted naphthalene derivatives, I, 403.
- and Chiurdoglu, G., infra-red absorption spectra (7–20 μ) of several compounds possessing rings of five or six carbon atoms, I, 8.
- and Freymann, R., infra-red absorption spectra of solids by the powder method; (acetates, formates, oxalates, acetylacetonates, sulphates), I, 354.
- See also Gerding, H., and Lambert, P.

- Lecomte, L., comparison of the infra-red absorption spectra of heterocyclic compounds and homocyclic hydrocarbons, I, 60.
- Lecoq, H., action of formaldehyde on anaesthetics, II, 265.
- Lecoq, R., variation in post-operative blood-chloride, III, 355.
- and Duffau, R., effect of complete avitaminosis-B or mineral disequilibrium on the composition of pigeon muscle, III, 164. Poisoning of muscle in total B-avitaminosis and in experimental, mineral disequilibrium, III, 494.
- and Flender, E., variations in the reduced glutathione content of pigeon tissues in total avitaminosis-B and acute carbohydrate alimentary disequilibrium, III, 919. Effect of total avitaminosis-B and acute carbohydrate disequilibrium on the ascorbic acid content of pigeon tissues, III, 993.
- See also Bertrand, I.
- Lecouturier, R., Ley, Titeca, and Bogaert, L. van, neoplastic cerebrocutaneous melanosis, III, 830.
- Lecuire, See Martin, P. E.
- Leddy, E. T. See Maytum, C. K.
- Lederer, E., isolation and structure of bonelline, the green pigment of *Bonellia viridis*, II, 563.
- and Verrier, M. L. [with Glaser, R., and Hutterer, C.], distribution and metabolism of vitamin-A in fresh-water fish, III, 850.
- See also Escher-Desrivieres, J., Glaser, R., and Nachmansohn, D.
- Lederer, E. L., calculation of internuclear distances, energies of separation, and atomic refraction, I, 62.
- Lederer, H., and Messerli, F. M., radioactivity and endemic goitre, III, 679.
- Lederer, J., and Bogaert, R., absorption of iron from chalybeate water, III, 765.
- and De Maesschalck, A., determination of serum-iron, III, 555.
- Ledingham, A. E. See Manske, R. H. F.
- Ledoux, E., heat of adsorption, I, 265. Variation of the triple point under pressure and by adsorption, I, 414.
- Lee, A. H., and Whiddington, R., excitation potentials of mercury vapour, I, 229.
- Lee, C. D., and Wilcke, H. L., migration of aetiologic agent of fowl leucosis when subjected to electrophoresis, III, 946.
- See also Wilcke, H. L.
- Lee, C. S. See Chi, Y. F.
- Lee, D. D., and Libby, W. F., β -rays of mesothorium I and radium D, I, 171.
- See also Libby, W. F.
- Lee, E., and Sutherland, G. B. B. M., peculiarity in the infra-red absorption spectrum of germane, I, 549.
- Lee, F. C. See Troland, C. E.
- Lee, G. See Van Rysselberghe, P.
- Lee, G. I., and Wright, T. A., identifying minerals with the aid of the spectrograph, I, 486.
- Lee, H. B. See Benedict, F. G.
- Lee, H. K., non-protein-nitrogen in blood. II. Relation between the function of the reticulo-endothelial system and non-protein-nitrogen of blood, III, 15.
- Lee, J. See Thatcher, H. S.
- Lee, K. H., soya-bean sauce with added calcium as a means of increasing calcium intake, III, 849.
- and Chen, T. T., effect of oxygen tension on proteolysis, III, 518.
- Lee, K. S., anticoagulation action of hirudin and of Bayer 205, III, 117.
- Lee, L. Y. See Chang, H. C.
- Lee, M. See Chown, B.
- Lee, P., and Erickson, B. N., platelet studies in menstruation and hæmophilia: total and differential counts, disintegration rates, and lipin distributions, III, 231.
- See also Erickson, B. N.
- Lee, R. C., rectal temperature of normal rabbit, III, 770.
- See also Benedict, F. G.
- Lee, S., and Sakurada, I., reaction kinetics of filiform molecules in solution. I. Alkaline saponification of polyvinyl acetates, I, 476.
- See also Sakurada, I.
- Lee, S. B. See Wilson, P. W.
- Lee, S. T. See Chi, Y. F.
- Lee, S. W., and Dougherty, G., properties of the thiomethyleneradical; behaviour with aluminium chloride in benzene, II, 211.
- Lee, T., the sedimentometer, III, 8.
- Lee, W. C. See Duffendaek, O. S.
- Lee, W. Y., and Li, S. L., distribution of phosphorus in the germinating soya bean, III, 106.
- Lee, Y. N. See Broughton, G.
- Leech, P., and Sykes, C., evidence for a superlattice in the nickel-iron alloy, Ni₂Fe, I, 412.
- Leedham, C. L., reaction to oxygen want, III, 462.
- Leekley, R. M. See Smith, L. I.
- Leendertse, J. J. See Waterman, H. I.
- Leeper, R. W. See Setzer, W. C.
- Lees, H. See Gridgeman, N. T.
- Lees, R. See Batchelor, R. C. L.
- Lefebvre, H. See Le Clerc, G.
- Lefebvre, J. See Jahiel, R.
- Lefèvre, J., manuel critique de biologie, III, 276. 3-Indolylacetic acid in various plant organs, III, 535. Similarity of action of phenylurethane and colchicine on vegetable plant cells, III, 801. Obtaining polyploid plants of agricultural interest, III, 1018.
- Le Fèvre, R. J. W., and Parker, C. A., dipole moment and configuration of arsenobenzene, I, 303.
- and Rayner, G. J., apparent dipole moment of hexamethylenetetramine in chloroform solution, I, 61.
- and Vine, H., dipole moments of (a) 4:4'-dinitro and 4:4'-dicyano-diphenyls, and (b) the isomeric diphenyl-4:4'-bisdiazocyanides, I, 10. Association of p-toluenesulphonmethylanilide and related compounds in solution: comparison of dielectric polarisation and cryoscopic measurements, I, 25. Association of acetic acid, of its three chlorinated derivatives, and of n-butyric and hexoic acids dissolved in benzene: dielectric polarisation compared with cryoscopic measurements, I, 25.
- See also Caldwell, C. C., De Gauck, V., Dostrovsky, I., Hartley, G. S., and Hopf, P. P.
- Le Fleming, H. See Field, J. W.
- Le Gault, R. R. See Kharasch, M. S.
- Léger, E., transformations of quinidine and quinine, II, 92.
- Leger, L. H. See Major, R. H.
- Legge, J. A., jun., vertical illuminator for low-magnification photography of polished surfaces, I, 537.
- Legge, J. W. See Lemberg, R.
- Legge, R. T., industrial medicine of tomorrow, III, 193.
- Legoux, C., ammoniacal calcium phosphide, Ca(Ph₂)₂·6NH₃, I, 482.
- Le Grand, A., and Année, P., catatonic action of cerebrospinal fluid in dementia præcox, III, 32.
- Le Grand, Y., fluorescence of the crystalline lens, III, 375.
- Legris, A. See Auvergnat, R.
- Lehman, A. J., respiratory inhibitory and paralytic effects of some barbital hypnotics and coal-tar analgesics, III, 507.
- See also Hanzlik, P. J.
- Lehman, E. P., and Amole, C. V., function of spleen in retardation of shock from hæmorrhage, III, 650.
- Lehman, G. See Bryant, G. W.
- Lehman, I., para-vaginal gland of *Hemiteles*, III, 542.
- Lehman, R. A., and Dater, A., absorption of mercurial diuretics as influenced by theophylline and other substances, III, 185.
- See also De Graff, A. C.
- Lehmann, E., and Eisenhuth, F., pine bark, I, II, 301.
- Lehmann, G., prevention and abolition of lactation with follicle hormone, III, 57. Action of oestrogenic hormone on hypersecretion of the mammary glands, III, 756.
- Lehmann, G. (Louisville), and Knoefel, P. K., pharmacologic study of trichloroethanol, III, 932.
- Lehmann, Gerhard. See Bredereck, H.
- Lehmann, Gunther, dust-fixing power of the nose and silicosis, III, 782. Reflex action of skin stimuli on nasal mucous membrane, III, 1044.
- Lehmann, H., formation of Robison ester, III, 926.
- and Schlossmann, H., action of cell-free muscle extract on insulin, III, 141.
- See also Gill, P. M.
- Lehmann, J., enzymic micro-determination of lactic acid in biological fluids. I, III, 221.
- and Nielsen, H. E., case of beriberi (followed by pellagra) verified, and followed during improvement by analyses of vitamin-B₁ in blood, III, 766.
- See also Hoff-Jørgensen, E.
- Lehmann, J. C., administration of anaesthetics, III, 615.
- Lehmann, P., absorption spectrum of praseodymium salts, I, 177.
- Lehmann, W. See Soskin, S.
- Lehmann, W. (Jena), spectrophotometric determination of potassium (Schuhknecht) compared with gravimetric methods in plant ash, feeding-stuffs, and fertilisers, III, 344.
- Lehmstedt, K., and Dostal, F., acridine. XIX. Absorption spectra of N-hydroxy-acridone and its sodium salt. XX. Organo-metallic syntheses in the acridine series. XXI. Quaternary 10-methoxy-acridinium bases, II, 37, 282, 342.
- Lehndorff, H., anæmic conditions in the new-born, III, 646.
- Lehné, M. See Cornec, E.
- Lehner, A., physiology of purple bacteria, III, 329.

- Lehner, R. See Schlöpfer, P.
 Lehoczy, T. See Benedek, L.
 Lehotzky, P. *van*, properties of chromatic substance, III, 2. Electric charge of cellular regions, III, 809.
 Leiba, S. P. See Kozakevitch, P. P.
 Leibel, B., and Hall, G. E., experimental insulin and metrazol shock. III. Cerebral blood flow changes during shock therapy. V. Effect of autonomic drugs on metrazol convulsions, III, 249.
 See also Banting, F. G.
 Leiber, (Miss) C., structural changes in anhydrous barium chloride by further heating, I, 244.
 Leiboff, S. L., and Tamis, A. B., extraction of urinary oestrogen, III, 144.
 Leibowitz, J., and Hestrin, S., differentiation of disaccharide-splitting enzymes, III, 519. Direct fermentation of maltose by yeast, III, 724.
 Leicester, H. M. See Henne, A. L.
 Leidler, R., localisation of vertigo in brain-stem, III, 829.
 Leifer, W. See Chargin, L., and Hyman, H. T.
 Leigh, E. See Hodgson, H. H.
 Leigh, M. D. See Orth, O. S.
 Leighton, B. See Levy, W.
 Leighton, P. A. See Smith, R. N.
 Leighton, W. G. See Smith, R. N.
 Leikensohn, A. See Koster, H.
 Leinbrock, A. See De Busmann, M.
 Leinfelder, P. J., pathologic changes in amblyopia following trypanamide therapy, III, 179. Retrograde degeneration in optic nerves and retinal ganglion cells, III, 674.
 Leininger, P. M., and Kilpatrick, M., inversion of sucrose, I, 86. Hydrolysis of ethylal, I, 570.
 Leins, F., vitamin-B₁ in diseases of the spinal cord, III, 494.
 Leipunski, A. I. See Borisov, M. D.
 Leishman, A. W. D., diuresis after sulph-anilamide, III, 302.
 Leiter, L., unusual hypertensive renal disease, III, 22.
 Leitner, S. J., the Pelger-Huet familial nuclear anomaly of the leucocytes, III, 114. Action of hormones on cultures of *B. tuberculosis*, III, 206. Familial elliptocytosis, a hereditary anomaly of red cells, III, 646. Use and dangers of gold therapy in tuberculosis and chronic rheumatism, III, 1089.
 Lejeune, A. See Lambillon, J.
 Lejeune, G., solubility of ethers in solutions of strong acids, I, 315.
 Leloir, L. F., chemistry of enzymes, III, 321.
 and Muñoz, J. M., fatty acid oxidation in liver, III, 707.
 Le Lous, J. See Velluz, L.
 Lemaire, A. See Loeper, M.
 Le Maistre, J. W., Rainsford, A. E., and Hauser, C. R., reactions of *N*-chloroaldehydes with Grignard reagents, II, 372.
 Leman, A., determination of phenolic and naphtholic hydroxyl groups by means of benzoic anhydride, II, 196.
 Lemarehants, M., and Juda, W., electrolytic overpotential phenomena, I, 84.
 and Péju, L., complexes; application of the double decomposition
 $(\text{NH}_4)_2\text{Mn}(\text{SO}_4)_2 \cdot 6\text{H}_2\text{O} + \text{NiSO}_4 \cdot 6\text{H}_2\text{O} \rightleftharpoons (\text{NH}_4)_2\text{Ni}(\text{SO}_4)_2 \cdot 6\text{H}_2\text{O} + \text{MnSO}_4 \cdot 7\text{H}_2\text{O}$, I, 147.
 Le Masurier, H. E., and Branion, H. D., relation of mineral supplement consumption to normal skeleton development as judged by X-ray examination of various breeds of fowl to six weeks of age, III, 162.
 Lemberg, R., physiological disintegration of hemoglobin, III, 813.
 and Legge, J. W., determination of ascorbic acid in the presence of hemoglobin, III, 995.
 Legge, J. W., and Lockwood, W. H., coupled oxidation of ascorbic acid and hemoglobin. I, III, 650.
 and Lockwood, W. H., bilichrysin; new type of bile pigment, II, 522.
 Norrie, M., and Legge, J. W., catalase, III, 1096.
 See also Holden, H. F.
 Lemere, F., effects on electroencephalogram of various agents used in treating schizophrenia, III, 373. Electroencephalography, III, 749.
 Lemesle, R., tannin-mucilage complex of Myristicaceae, III, 1112.
 Lemmel, G., ascorbic acid saturation, III, 496.
 Lemmerz, A. H. See Knüchel, F.
 Lemoigne, M., Monguillon, P., and Desveaux, R., reduction of nitrous acid by higher plants; role of ascorbic acid. II. and III, III, 533, 802.
 Lemonde, H., tensiometer with a flexible (metallic) sheet for measurement of surface tensions, I, 161.
 Lemos, A., possible precursors of ascorbic acid, III, 605.
 Lemoyne, S. See Colin, H.
 Lemser, H., latent hereditary diabetes and carbohydrate tolerance, III, 79. Diabetic twins, III, 140.
 Lenarski, I. I., catalytic oxidation and preparation of hexahydrobenzylamine, II, 308.
 Lendle, L., and Puhlmann, H., relation of sugar component of *k*-strophanthin to pharmacological action, III, 931.
 Lendon, N. C., effects of sustained muscular effort in hot climate; loss of fluids and chlorides, III, 620, 867.
 Lengyel, B. A. See Freeman, Harry.
 Lengyel, E., varieties of jasper from the Tokaj-Hegyalja mountains, I, 392.
 Lenkeit, W., and Becker, M., fate of the urea of "amide flakes" in the rumen, III, 172. Utilisation of lactose by poultry, III, 855.
 Lennard-Jones, J. E., and Coulson, C. A., structure and energies of some hydrocarbon molecules, I, 511.
 and Devonshire, A. F., critical and co-operative phenomena. III. Theory of melting and structure of liquids. IV. Theory of disorder in solids and liquids and process of melting, I, 248, 358.
 Lennerstrand, A., inactivation and reactivation of cozymase in dry and living yeast, III, 323.
 Lennette, E. H., and Campbell, D. H., permeability of blood-central nervous system barrier to sodium bromide in experimental poliomyelitis, III, 1039.
 Campbell, D. H., and Reames, H. R., nitrate and bromide tests for blood-central nervous system barrier permeability in experimental poliomyelitis, III, 903.
 Lenning, B. See Roberts, L. J.
 Lennon, H. C. See Tyson, R. M.
 Lennon, R. W. See Strom-Olsen, R.
 Lennox, F. G., physiology and toxicology of blowflies. I. Synthetic medium for aseptic cultivation of larvæ of *Lucilia cuprina*, III, 867.
 Lennox, W. G., and Behnke, A. R., effect of increased oxygen pressure on seizures of epilepsy, III, 130.
 See also Gibbs, F. A.
 Lenoci, (Signa.) R. See Berlingozzi, S.
 Lenoir, J. See Sterne, J.
 Lenti, C., glycolysis in kidney, III, 66. Increase in the iron content of the organism in high mountains, III, 156. Iron in fertilised hen's egg and embryo, III, 912.
 See also Mazza, F. P.
 Lentzen, T. See Werle, E.
 Lenz, A. See Hertel, E.
 Lenz, W., eigen-value problem of ideal dilute gases, I, 67.
 Lenzer, T. See Schmid, L.
 Lenzi, M., apparatus for demonstrating X-ray fluorescence and phosphorescence, I, 537. Instrument for study of X-ray-luminescent phenomena, III, 319.
 Lenzi, S. See Grinò, S.
 Leon, T. J., and Chaix, P., physiological properties (provitamin-A) of pigments of *Rhodotorula sarniei*, III, 163.
 Leonard, E. R. See Wardlaw, C. W.
 Leonard, O. A., transformation of sugars in sugar-beet and maize leaves; invertase activity, III, 1017.
 Leonard, S. L., blood-cholesterol in thyroidectomised rats as related to the effectiveness of gonadotropic hormones, III, 677. Induction of singing in female canaries by male hormone, III, 1056.
 See also Hamilton, J. B.
 Leonardsen, R. See Berner, E.
 Leong, P. C., vitamin-B₁ in the animal organism. III. Maximum storage of vitamin-B₁ in various species, III, 920.
 Leonian, L. H., and Lilly, V. G., source of nitrogen and of accessory growth factors in nutrition of fungi, III, 425. Nutrition of fungi. I. Thiamin, its constituents, and the source of nitrogen, III, 521.
 See also Lilly, V. G.
 Leonteeva, A., determination of the boundary of softening range for the binary system $\text{Na}_2\text{B}_4\text{O}_7\text{-B}_2\text{O}_3$, I, 81.
 Leontovitch, M. A. See Blochinzev, D. I.
 Leopold, H., and Buka, B., the amyloprocess, III, 327.
 Leopold, J. S., and Sobel, I. P., sulphapyridine therapy in pneumonias of infancy and childhood, III, 1082.
 LePage, G. A. See Pett, L. B.
 Lepel, G., pathogenesis of hemolytic jaundice, III, 650.
 Lepeschkin, E., chest lead electrocardiogram in normal children, III, 235. Electrocardiogram in experimental coronary insufficiency, III, 237.
 Lepeschkin, V. V., colloidal chemistry of the protoplasm, III, 96. Thermal and photochemical phenomena during the death of cells. I. Heat of death and injury in yeast, III, 326.
 Lepesme, P., artificial variation of water content of insects and its lethal limit, III, 867.

- Lepin, L. K., and Bromberg, A. V., influence of electrolytes on formation of silver chloride sols. I. Coagulating effect of excess of chlorides and their mixtures, I, 469. Coagulation of hydrophobic sols with mixed electrolytes. I. Coagulation of negative silver iodide sol with a mixture of salts of potassium and multivalent metals. II. Evaluating ion antagonism in coagulation, I, 563.
- and Strachova, G., surface reactions. II. Effect of solutions of neutral salts on ash-free charcoal, I, 561.
- Lépine, P., isolation of the poliomyelitis virus from contaminated material, III, 946.
- See also Mollaret, P.
- Lepkovsky, S., Taylor, L. W., Jukes, T. H., and Almquist, H. J., effect of riboflavin and the filtrate factor on egg production and hatchability, III, 703.
- See also Fouts, P. J.
- Leplat, G., glycerin in dehydration of connective tissues and of bone, III, 809.
- Lepukaln, A. F., ephedrine therapy of traumatic shock, III, 363.
- and Bubnov, M. A., therapeutic action of anti-shock measures, III, 363.
- Lequime, J., and Denolin, H., relation between cardiac frequency and output in the dog [after atropine], III, 456.
- See also Durieu, H.
- Leray, A. See Hering, H.
- Lerche, B., pH of blood in circulatory shock, III, 823.
- and Weiss, A., role of liver in plasma loss in histamine and peptone shock, III, 932.
- Le Riche, H., birth weights of European infants born at the Modersbond Maternity Hospital, Pretoria, during 1933—35, III, 59.
- Leriche, R., rules of endocrine and sympathetic surgery, III, 131. Pain in nerve injuries, III, 589.
- and Jung, A., surgical treatment of diabetes by biliary fistula, III, 997.
- Lerigues, J. See Baudouin, A.
- Lerman, G. M. See Greenhouse, L. I.
- Lerman, J. See Means, J. H.
- Lerner, C. See Karp, F. L.
- Lerner, I. M., growth ratio of the fowl's tarsometatarsus variation with respect to (I) body-weight, (II) time, III, 442. Shape of the chick embryo growth curve, III, 443.
- Lerner, M. See Worrall, D. E.
- Le Roux, L. J., Lu, C. S., and Sugden, S., chemical separation of isomeric ^{80}Br atoms, I, 295.
- and Sugden, S., kinetics of exchange reactions. I. *n*-Butyl bromide, I, 526.
- Leroux, R., Maranon, G., Richet, C., and Pergola, A., tetany in adult and persistence of thymus, III, 1050.
- and Vermes, E., anaemia after operations on the stomach, III, 548.
- Le Roy, D. J., and Gordon, A. R., transference numbers of sodium acetate in aqueous solution, I, 373.
- Le Roy, G. V. See Kandel, E. V.
- Lesage, M. See Kwal, B.
- Leschewski, K., and Kothe, K., action of carbon monoxide on ammoniacal copper chromate solutions, I, 273.
- Lescœur, L., variations of formol and phthalein acidity in urine; graphical interpretation, III, 487.
- See also Belluc, S., and Chaussin, J.
- Lesh, J. B., Underkofler, L. A., and Fulmer, E. I., effect of composition of medium on growth of yeast in presence of bios preparations. II. Response of strains of *Saccharomyces cerevisiae*, III, 100.
- Leshin, S. See Brodie, B. B.
- Leslie, A. See King, F. H.
- Leslie, C. J., and De Sanctis, A. G., serum treatment of meningococcal meningitis, III, 429.
- Leslie, R. T., and Heuer, W. W., continuous high-vacuum still and b.p. apparatus, and the systematic distillation of a dewaxed lubricant fraction of petroleum, I, 45.
- Leslie-Smith, M. See Wauchope, G. M.
- Lesmüller, A. See Schwaibold, J.
- Leśniński, W., and Turska-Jaroszewiczowa, H. W., bromination of anthraquinone-2-sulphamic acid, II, 271.
- Lespagnol, Breton, and Duhem, blood-cholesterol, -calcium, -nitrogen, and pressure in old age, III, 357. Blood-sugar and the residual chromic index in old age, III, 357.
- Lespagnol, A., Bizard, G., and Turlur, J., pharmacology of α -amino- β -phenyl- α -3:4-dihydroxyphenylethane, III, 930.
- Herlemont, R., and Stern, G., bromine index of cinnamic [acid] derivatives, II, 352.
- Turlur, J., and Lespagnol, L., hydroxy-derivatives of diphenylethylamine, II, 541.
- Lespagnol, L. See Lespagnol, A.
- Lespieau, R., synthesis of *r*-arabitol and adonitol, II, 46. Diacetylenylcarbinol, $\text{OH}\cdot\text{CH}(\text{C}\equiv\text{CH})_2$, II, 355.
- Lessel, H., fused kidneys in man and the animal kingdom, III, 345.
- Lesser, M. See Jenkins, R. L.
- Lesses, M. F. See Loman, J.
- Lesslie, M. S., configuration of heterocyclic compounds. X. Optical resolution of 10-phenylphenoxarsine-10-oxide-2-carboxylic acid, II, 396.
- Lester, C. W., and Rovenstine, E. A., bronchography in children, III, 824.
- Lesueur, G. See Maranon, G.
- Lesuk, A. See Stodola, F. H.
- Lesure, A. See Loeper, M.
- Leszezynski, J., action of glycine on plain muscle contraction, III, 465.
- Letang, N. J. See Brown, W. G.
- Letulle, R., and Higounet, H., phosphatases of serum, III, 14.
- Leubner, H., determination of enzymes in the duodenal contents. I. II. Trypsin. III. Lipase, III, 148, 387.
- See also Berger, W.
- Leuchs, H., *Strychnos* alkaloids. CII. Isomeric substances $\text{C}_{15}\text{H}_{15}\text{O}_5\text{N}_2$ from brucinonic acid, II, 41. [Strychnine and brucine; re-examination of the action of bromine on diketonucidine and its bearing on the structure of the alkaloids], II, 489.
- and Grunow, H., *Strychnos* alkaloids. CV. Action of bromine water on 2:3-diketonucidine, II, 290.
- and Louis, H. L., *Strychnos* alkaloids. CIII. Behaviour of the methobromide of the Hanssen acid $\text{C}_{15}\text{H}_{25}\text{O}_4\text{N}_2$ during hydrogenation and treatment with bromine. CVII. Transformation of the nitroquinones from ψ -brucine and dihydro- ψ -brucine, II, 232, 489.
- and Seeger, H., *Strychnos* alkaloids. CIV. Quinones from ψ - or 9-mono-hydroxy-brucine and an unusual isomerisation of the nitroquinone, II, 232.
- Leuchs, H., and Tessmar, K., *Strychnos* alkaloids. CVI. Methylations in the series of ψ - and 9-mono-hydroxybrucine, and migrations or methyl between oxygen and nitrogen, II, 349.
- Leukart, R. H., speed of monocular accommodation, III, 1040.
- Leulier, A., and Cohen, R., chloro-compounds obtained by means of aqueous sodium hypochlorite, II, 228.
- and Tuarze, L., seasonal variations in the leaf-juice of the cherry-laurel, III, 802.
- Leung, C. C. See Chi, Y. F.
- Leutgoeb, R. A., and Heinrich, H., electrolytic preparation of glucuronic acid, II, 242.
- Leuthardt, F., chemistry of pancreatic secretion, III, 270. Diffusion in tissue slices; application to measurements of urea formation in the liver, III, 271.
- Leuthner, G. See Jander, W.
- Leutwyler, F. See Treadwell, W. D.
- Levaditi, C., chemotherapy in bacterial infections, III, 306. Experimental chemotherapy of inguinal lymphogranulomatosis, III, 306. Ultravirus and fluorescence; determination of elementary corpuscles in the vaccine; complex constitution of suspensions of vaccinal corpuscles; ultracentrifuging; relation between the number of the elementary vaccinal corpuscles and the virulicide and agglutinating properties of the anti-vaccinal sera, III, 728, 878, 1014. Artificial production of neurovaccinal strains, III, 948.
- Girard, A., and Vaisman, A., curative action of nitrogenous compounds containing the sulphone group in mice infected with *Streptococcus*, Friedländer's bacillus, *Gonococcus*, and *Pneumococcus*, III, 928.
- Krassnoff, D., Reinié, L., and Giuntini, J., ultravirus and fluorescence; ultrafiltration and enumeration of the elementary corpuscles of the vaccine, III, 878.
- Le-Van-Sen, and Reinié, L., ultravirus and fluorescence; behaviour towards ultra-violet irradiation in a fluorescent medium; trypanosomes, bacteria, and enzymes, III, 946.
- and Lominski, I., ultravirus and fluorescence; behaviour towards ultra-violet irradiation in a fluorescent medium; bacteriophages, III, 946.
- Lominski, I., Reinié, L., and Le-Van-Sen, ultravirus and fluorescence; behaviour towards ultra-violet irradiation in a fluorescent medium; elementary vaccinal corpuscles, III, 946.
- and Reinié, L., ultravirus and fluorescence; cutaneous virulence and number of vaccinal corpuscular elements (neurovaccine) as function of the origin of these elements, III, 878.
- Reinié, L., and Bequignon, R., ultravirus and fluorescence; elementary corpuscles of the vaccine and vaccinal cratitis, III, 796.
- Stamatin, L., Le-Van-Sen, and Reinié, L., ultravirus and fluorescence; cutaneous virulence and the number of vaccinal corpuscles; neurovaccine; dermovaccine, III, 878.
- and Vaisman, A., anti-endotoxic chemotherapy, III, 929.

- Levaditi, C., Vaisman, A., and Krassnoff, D., chemotherapeutic action of sulphur derivatives in experimental pneumococcal infections, III, 525.
- Vaisman, A., and Manin, Y., comparison between prophylactic and curative dosage of novarsenobenzeno, III, 306.
- Vaisman, A., and Reinié, L., anti-endotoxic chemotherapy, III, 503. Chemotherapy of inguinal lymphogranulomatosis, III, 928.
- Le-Van-Sen. See Levaditi, C.
- Levene, H. M. See Hoskins, R. G.
- Levene, P. A., structure of deoxyribonucleic acid; diphosphoric esters of pyrimidine deoxyribosides, II, 37.
- and Kuna, M., partly O-methylated hexitols. I. 1:2:3:5:6-O-pentamethyl-d-sorbitol, II, 137.
- Meyer, G. M., and Kuna, M., union of galacturonic residues in pectic acid, II, 298.
- and Rothen, A., Walden inversion. XXI. Halogenation of aromatic carbinols; rotatory dispersion of aromatic carbinols and corresponding bromides, II, 155.
- See also Raymond, A. L., Schmidt, Gerhard, and Tipson, R. S.
- Levenson, H. S. See Smith, H. A.
- Lever, R. A., irritant exudation from a centipede, III, 416.
- Levesque, C. L. See Marvel, C. S.
- Levey, S. See Merritt, L. L., jun.
- Levi, F., frequency change of light in diffraction by ultrasonic waves, I, 409.
- Levi, G., size of nerve-cells in the sacral [spinal] ganglia of *Mus musculus*, III, 128. Structure of the reticular fibres in the muscle of fowl's stomach, III, 147. Vital staining with alizarin for calcification in enamel of teleosts, III, 809.
- Levi, G. R., fractional precipitation and viscosity of cellulose acetates, I, 23.
- and Rossi, G., lattice distortions in pyrophoric metals. I. II. Lead and nickel, I, 12.
- Levi, H. See Coster, D., and Hevesy, G.
- Levi, H. B. See Hevesy, G. C.
- Levie, L. H. See Freud, J.
- Levin, B. S., and Olitzki, L., complete loss of the pathogenic action of *B. typhimurium*, administered orally, after frequent subculturing in lecithin-containing media, III, 632. Effect on bacteria of continued cultivation in lecithin broth, III, 727. Total loss of virulence of *B. typhimurium* administered intraperitoneally after prolonged culture in presence of lecithin, III, 945. Unsuccessful attempts to re-establish the pathogenic action of *L* strains of *B. typhimurium*, III, 945.
- Levin, C. M., Kleefeld, E. A., and Luciano, F. A., experience with zinc-insulin crystals, III, 976.
- Levin, E., effect of adrenaline on circulating blood volume, III, 9.
- Levin, L. See Dundy, H. D., and Tyndale, H. H.
- Levin, N., treatment of experimental tuberculosis in the guinea-pig with sulphonamides, III, 610.
- Levina, E. J., limits of expansion of the fields of crystallisation of the system $\text{MgSO}_4\text{-NaCl-H}_2\text{O}$, under conditions of isothermal evaporation at 25°, I, 264.
- Levina, L., movement of water and of dissolved substances through plant tissues, III, 622.
- Levina, M. E. See Novoselova, A. V.
- Levina, M. I., and Stzibarovskaja, N. P., equilibrium between liquid and gas at high pressures and temperatures. IV. Solubility of air in water and in sodium hydroxide solutions of various concentrations, I, 466.
- Levina, M. M. See Golombik, M. S.
- Levina, P. J., Golub, G. B., and Smirnov, K. M., contact isomerisation of ϵ -cyclohexyl- Δ^a -pentone and ϵ -cyclohexyl- Δ^a -pentinene, II, 536.
- Levina, R. J., and Levina, S. J., catalytic transformations of 1-vinyl- Δ^2 -cyclohexeno and 1-acetylenyl- Δ^1 -cyclohexeno, II, 252.
- Levina, S. See Jermolenko, N., and Lukovzev, P.
- Levina, S. J. See Levina, R. J.
- Levine, B. S., unity of the hæmolytic, dermonecrotic, and lethal properties of staphylococcal exotoxin and of their corresponding counterparts in staphylococcal antitoxin, III, 527.
- Levine, (Miss) J. H. See Kharasch, M. S.
- Levine, L. See Elkins, H. B.
- Levine, M. See Bieter, R. N., Hoyt, R. E., Larson, W. P., and Vaughn, R.
- Levine, N. D., dehydration of methylen-blue-stained material without loss of dye, III, 644.
- Brandy, C. A., and Graham, R., cultivation of *Trichomonas* in developing chicken eggs, III, 543.
- Levine, P., and Katzin, E. M., temporary agglutinability of red blood cells, III, 7.
- and Stetson, R. E., intra-group agglutination, III, 1028.
- See also Katzin, E. M.
- Levine, R., Hechter, O., Grossman, A., and Soskin, S., reduced glutathione of tissues and insulin sensitivity, III, 1050.
- and Soskin, S., acid-base balance and distribution of fat in the blood, III, 894.
- See also Soskin, S.
- Levine, S., problems of stability in hydrophobic colloidal solutions. I. and II. Interaction of two colloidal metallic particles, I, 318. Interaction of two colloidal particles, using the complete Debye-Hückel equation, I, 610.
- See also Dube, G. P.
- Levine, S. A., angina pectoris and its relation to coronary artery disease, III, 456.
- See also Robinson, R. W.
- Levine, S. Z., Wheatley, M. A., McEachern, T. H., Gordon, H. H., and Marples, E., daily water exchange of normal infants, III, 1079.
- See also Gordon, H. H.
- Levine, V. E. See Sachs, A.
- Levinson, A., cerebral manifestations in the new-born, III, 669.
- See also Cohn, D. J., and Kaplan, I.
- Levinson, M. S., nitrogen metabolism in experimental avitaminosis-B, III, 286.
- Levinson, S. A., Waterhouse-Friderichsen syndrome [hæmorrhage into the adrenal gland], III, 682.
- and Klein, R. I., Weltmann serum coagulation reaction, III, 816.
- Levinson, S. O. See Hyland, C. M.
- Levit, V. See Slatineanu, A.
- Levitt, R. O. See Volini, I. F.
- Levitz, M., Perlman, D., and Bogert, M. T., products of the cyclising dehydration of 1- β -phenylethylcyclohexanol and synthesis of spirocyclohexane-1:1-indan-3-one, II, 551.
- Levkoev, I. I. See Gorbatscheva, I. N.
- Levschin, V., and Rickman, E., phosphorescence mechanism of samarium phosphorescent substances studied by the decay of their luminescence, I, 181.
- Levschin, V. L., luminescence of complex molecules, I, 241.
- Levschuk, I. J. See Nikolin, V. I.
- Levy, G. A., and Nisbet, H. B., local anæsthetic properties of heterocyclic compounds, III, 508.
- Lévy, G. See Chorine, V.
- Lévy, Jeanne, and Michel, E., enzymic hydrolysis of atropine, III, 422.
- See also Fichtenberg, D. G., and Kahane, E.
- Levy, Julius, and Silver, H. B., can rickets be eliminated from the large cities? III, 605.
- Levy, L., and West, D. W., differential action of nickel, iron, and cobalt on the fluorescence and phosphorescence of certain zinc sulphide phosphors when excited by X-rays, I, 122.
- Lévy, R. See Clerc, A., and Cordier, D.
- Levy, R. C., partial heart block from vagus action, III, 560.
- Levy, R. L., Brunn, H. G., and Russell, N. G., electrocardiographic changes caused by induced anoxæmia as test for coronary insufficiency, III, 559.
- Levy, S. E., Robinson, C. S., and Blalock, A., effect of altering renal blood pressure and blood flow on glomerular filtration of a transplanted kidney in unanæsthetised dogs, III, 390.
- See also Blalock, A., and Diaz, J. T.
- Levy, S. R. See Manly, M. L.
- Levy, W., Greenstein, N. M., and Leighton, B., portal cirrhosis in childhood; report of three cases, III, 986.
- Levy, (Miss) W. J., and Campbell, N., qualitative organic analysis. II. Identification of alkyl halides, aromatic nitroso-compounds, aromatic hydrocarbons, and cyclopentadiene compounds, II, 526.
- Levy-Wolff, L., pathogenesis of retinitis pigmentosa, III, 837.
- Lew, W. See Poo, L. J.
- Lewandowski, A. See Krause, A.
- Lewandowski, M. See Mitobedzki, T.
- Lewes, D. See Zuckerman, S.
- Lewi, S. See Wahl, R.
- Lewin, A. See Glick, D.
- Lewin, J. See Azerad, E., and Baudouin, A.
- Lewin, P. See Scheman, L.
- Le-Winn, E. B., hyperinsulinism and pregnancy, III, 141.
- Lewinsky, W., and Stewart, D., innervation of the human gum, III, 29. Innervation of the teeth and their related tissues, III, 279.
- Lewis, A. A., and Turner, C. W., chemical concentration of mammogen from prehypophyseal tissue, III, 379.
- Turner, C. W., and Gomez, E. T., biological assay of the mammogenic duct growth factor of the anterior pituitary, III, 577.
- Lewis, A. H. See McBain, J. W.
- Lewis, B. See Carroll, O.

- Lewis, *Bernard*, and Elbe, *G. von*, incomplete rotational excitation in diatomic gases at ordinary temperatures and pressures, I, 247.
See also Elbe, *G. von*.
- Lewis, *D. R.*, Madel, *G. A.*, and Drury, *J.*, fatal poisoning by "meta fuel" tablets, III, 934.
- Lewis, *D. T.*, kinetics of decomposition of acetaldehyde-ammonia in aqueous acid solution, and notes on the aldines, I, 423.
- and Davis, *V. E.*, determination of arsenic in organic and inorganic compounds, I, 215.
- and Morgan, *A. R.*, viscosities of chemically related liquids, and their dependence on mol. wt. and molecular volume. II., I, 515.
- Lewis, *E. B.*, effect of excision of antral mucosa on secretion of acid by the stomach, III, 62.
- Lewis, *F.*, dangers in the use of chemical hair straightener, III, 511.
- Lewis, *F. M.*. See Price, *C. C.*
- Lewis, *G. N.*, and Seaborg, *G. T.*, primary and secondary acids and bases, I, 471. Trinitrotriphenylmethide ion as a secondary and primary base, I, 472.
- Lewis, *H. B.*. See Gortner, *R. A.*, jun., Jen, *P. C.*, and Velick, *S. F.*
- Lewis, *H. K.*, & Co., Ltd., catalogue of Medical and Scientific Lending Library. Part II. Classified index of subjects, with names of Authors who have written upon them, III, 954.
- Lewis, *J. M.*, influence of menstruum on effectiveness of vitamin-D obtained from livers of percomorph order of fish, III, 853.
See also Haig, *O.*
- Lewis, *J. R.*. See Hill, *Rowland*.
- Lewis, *J. T.*, and Prieto, *R. O.*, adrenaline secretion in the denervated adrenal, III, 581.
- Lewis, *L. A.*. See Hartman, *F. A.*
- Lewis, *M.*. See Cooper, *F. B.*, and Gross, *P.*
- Lewis, *M. R.*, transplantable lymphosarcoma in mice, III, 490. Inertness of sulphanimide in relation to tumours in mice, III, 492. Transmissible monocytoma of mouse, III, 764.
See also Cutting, *W. C.*
- Lewis, (*Miss*) *N.*, and White, *J. U.* band spectrum of HS, I, 401.
- Lewis, *R. M.*, and Hinshelwood, *C. N.*, thermal decomposition of nitrous oxide, I, 148.
- Lewis, *R. R.*. See Trevithick, *H. P.*
- Lewis, *R. W. J.*. See Breenkridge, *J. G.*
- Lewis, *T.*, and Kellgren, *J. H.*, referred pain, visceromotor reflexes, and associated phenomena, III, 828.
- Lewis, *W. B.*. See Boldyreff, *W. N.*
- Lewis, *W. C. M.*. See Guest, *W. L.*
- Lewis, *W. H.*, contorted mitosis and the superficial plasmagel layer [in sarcoma], III, 700. Normal and malignant cells in culture, III, 889. Plasmagel layer in movements of cells, III, 1024.
- Lewis, *W. H.*, jun., and Alving, *A. S.*, changes with age in renal function in adult men. I. Clearance of urea. II. Amount of urea-nitrogen in blood. III. Concentrating ability of kidneys, III, 595.
- Lewis, *W. K.*, and Broughton, *G.*, conductivity of gelatin in acid solution, I, 259.
- Lewison, *M.*. See Grulee, *C. G.*
- Lewit, *K.*. See Langenecker, *H.*
- Lewy, *A.*, a case of streptococcus meningitis with streptococcemia; recovery, III, 178.
- Lewy, *F. H.*, role of cervical nerves in facial sensations and quantitative disturbance of sensitivity in major trigeminal neuralgia, III, 245.
- Lex, *J. K.*, and Parker, *G. M.*, technical, mechanical, and interpretative aspects of basal metabolism, III, 706.
- Lexner, *E. W.*, action of vitamin-C on reactionary hyperemia during healing of fractures, III, 704. Vitamin-C, callus formation, and hyperemia, III, 921.
- Ley, *H.*, and König, *E.*, absorption spectra of solutions of the more important acids of elements of the sulphur group, I, 7.
- and Specker, *H.*, determination of constitution on the basis of spectra of solutions, I, 119. Fluorescence and absorption measurements on benzene derivatives, particularly condensed systems, I, 404.
- Ley, *H. A.*, jun. See Short, *J. J.*
- Ley, *J.*. See Baonville, *H.*, and Lecourturier, *R.*
- Leyda, *F. A.*. See McBain, *J. W.*
- Lhez, *A.*. See Lazorthes, *G.*
- Li, *C.*. See Stewart, *T. D.*
- Li, *C. H.*, keten generator, II, 493.
- Simpson, *M. E.*, and Evans, *H. M.*, action of keten on the pituitary lactogenic hormone, III, 1047.
See also Evans, *H. M.*
- Li, *H. C.*. See Frazier, *C. N.*
- Li, *R. C.*, relationship between dosage of prolan and weight response of testes and accessory sex organs in the immature rat, III, 51.
- Li, *S. L.*. See Lee, *W. Y.*
- Li, *T. H.*. See Chang, *H. C.*, and Feng, *T. P.*
- Liaci, *L.*, effect of glyceraldehyde on blood-sugar and glycogenesis, III, 301. Effect of saliva on blood-sugar, III, 451. Toxicology of isostrychnine and bromo-isostrychnine, III, 615. Changes in blood-calcium after administration of colloidal sandarac resin, III, 619. Diffusion and distribution of sulphanimide in the organism, III, 710. Effect of eserine [on blood-sugar], III, 861.
- Lian, *C.*, and Baraige, the systolic-diastolic constant, III, 744.
- Liandrat, *G.*, two examples of non-additivity of photo-electric effects of simultaneous luminous fluxes, I, 126, 538.
- Liang, *S. C.*. See Hönigschmid, *O.*
- Liard, *J.*. See Kerven, *A. M.*
- Liaskovskaja, *G. V.*. See Vladimirov, *A. V.*
- Libby, *R. L.*, and Adam, *J. N.*, precipitative method for titation of tetanus toxin and antitoxin, III, 795.
- Libby, *W. F.*, stability of uranium and thorium for natural fission, I, 443. Natural radioactivity of lutecium, I, 503.
- and Lee, *D. D.*, energies of the soft β -radiations of rubidium and other bodies, I, 170.
- and Long, *E. A.*, scattering of slow neutrons by gaseous ortho- and para-hydrogen: spin-dependence of the neutron-proton force, I, 232.
See also De Vault, *D. C.*, and Lee, *D. D.*
- Libelli, *G. M.*, effects of stimulation of cervical sympathetic on position of the rabbit's ear, III, 471. Changes in the position of the auricle of the rabbit's ear due to stimulation of the cervical sympathetic nerve and their independence of vasomotor phenomena, III, 471. Influence of cervical sympathetic on position of rabbit's ear, III, 969.
- Liber, *A. F.*, dilated cavum septi pellucidi and juxta-ventricular cavities, III, 668.
- Liberalli, *C. H.*, elimination of the phosphate ion in qualitative analysis by ignition, I, 385.
and Lima, *J.*, coumarin and oil from cumarú (*Torresea cearaensis*, Fr. All.) from the north-east [of Brazil], III, 884.
See also Da Cruz, *J. P. G.*
- Liberman, *A. L.*. See Kazanski, *B. A.*
- Libermann, *D.*. See Carré, *P.*
- Liberson, *W.*. See Pagniez, *P.*
- Libet, *B.*, and Gerard, *R. W.*, control of the potential rhythm of the isolated frog rain, III, 670.
and Yesinick, *L.*, collection of urine in dogs, III, 1061.
- Libowitzky, *H.*. See Fischer, *Hans*.
- Lichatscheva, *A. I.*, and Lutschinski, *G. P.*, conditions of phase equilibrium in systems containing halides and free halogens. II. Distribution of bromine between aqueous potassium bromide and benzene, I, 72.
- Lichoscherstov, *M. V.*, Shabotinskaja, *V. E.*, and Pavlovskaja, *L. D.*, synthesis of $\beta\beta$ -dichloro- and β' -chloro- β -hydroxyethers; reaction of ethylene chlorhydrin and glycol with benzenesulphon-dichloroamide, in presence of olefines, II, 199.
- Lichtblau, *H.*, isotopic abundance and at. wt. of europium, I, 292.
See also Mattauch, *J.*
- Lichtenberg, *E.*. See Neumann, *K.*
- Lichtenberg, *H. L.*. See Riesenfeld, *E. A.*
- Lichtenstein, *L.*, pathological changes following therapeutic hyperthermia, III, 867.
- Lichtenstein, *N.*, hydrolysis of acropeptides by pancreatic proteinase, III, 722.
- Lichtenstern, *F.*. See Pauli, *W.*
- Lichtenwald, *H.*. See Fischer, *Hans*.
- Lichtenwalter, *M.*. See Gilman, *H.*
- Lichtman, *A. L.*, and Chambers, *W. H.*, reduced blood coagulation time by injection of sterol extract of liver, III, 9.
- Lichtman, *S. S.*, influence of experimental biliary obstruction and liver injury on the total bile acid content and partition in blood and urine, III, 273.
- Lida, *E.*. See Marenzi, *A. D.*
- Liddell, *E. G. T.*, differences between experimental rigidities in cats, III, 666. and Phillips, *C. G.*, muscular rigidities in cats, III, 901.
- Lidwell, *O. M.*. See Bell, *R. P.*
- Lieb, *F.*, cultural separation of *B. paratyphosus* B, Schottmueller, and *B. enteritidis*, Breslau, III, 876.
- Liebaldt, *E.*, rhythmic precipitations in plant tissues, III, 532.
- Liebegott, *G.*, action of iodine on the thyroid in goitre, III, 476. Hodgkin's disease, III, 891.
- Lieber, *C.*, breakdown products from the irradiation of uranium with neutrons; strontium isotopes, I, 444.
- Lieber, *E.*. See Reasenberg, *J. R.*

- Liebermeister, G., adaptation in diseases of the respiratory tract, III, 661.
- Liebersson, A. See Goldbloom, A.
- Liebert, E. See Heilbrunn, G.
- Liebert, P. See Kuschinsky, G.
- Liebhaftsky, H. A., Rochow, E. G., and Winslow, A. F., m.p. of barium molybdate, I, 310.
- and Winslow, E. H., spectrophotometric determination of nitrite, and of nitric oxide in furnace atmospheres, I, 336.
- See also Blewett, J. P.
- Liebig, H. See Schroeder, H.
- Liebig, H. A. See Goossens, N.
- Liebig, H. G. See Neunhoeffer, O.
- Liebmann, H. See Crowther, J. A.
- Liebmann, J., Wortis, H., and Wortis, E., lack of correlation of capillary fragility with vitamin-C content of blood, spinal fluid, and urine, III, 288.
- Liechti, A., polymerisation of styrene in a 50-cycle electric field, and polymerisation of oil in electrical condensers, I, 31.
- and Feistmann, E., sensitivity of unicellular organisms to ultra-violet and visible light, III, 318.
- Feistmann, E., and Guggenheim, L., biological action of sensitizers in visible light, III, 717.
- Minder, W., and Müller, J. H., radiobiological experiments with *Drosophila* pupae, III, 717.
- Liechti, H., effect of a second complicating disease on pernicious anemia, III, 447.
- Liedholm, K., anti-coagulant action of rivanol, III, 648.
- See also Engghoff, H.
- Liedmann, A. See Elsner, H.
- Lieff, M., Wright, G. F., and Hibbert, H., lignin and related compounds. XXXVIII. Effect of solvents in the Grignard analysis for active hydrogen and carbonyl. XL. Extraction of birch lignin with formic acid, II, 273, 382.
- Liem, H. T., boric acid as a titrimetric standard, I, 576.
- Liempt, J. A. M. van, and De Vriend, J. A., light of combustion of metals and alloys. II, I, 332.
- and Wijk, W. van, noble gas content of air dissolved in water, I, 495.
- Lien, N. van. See under Nguyen-Van-Lien.
- Lieneweg, F., indication lag in thermometers, I, 220. Electrochemical measurement of concentrations (other than p_H) by formation of galvanic cells, I, 383.
- Lienhart, R., heredity of coat colour in dogs, III, 889.
- Lier, J. N. See De Bruin, T. L.
- Liesegang, R. E., supersaturated solutions of metallic silver. I. and II, I, 78, 320. Formation of spirals in precipitates in jellies, I, 321. Toxicoderm by metol, III, 191.
- Lieser, T., Henrich, L., and Fichtner, F., carbohydrates. XI. Reaction of cellulose with alkalis, II, 247.
- and Swiatkowski, H., carbohydrates. XII. Mode of reaction of cellulose dissolved in copper oxide-ammonia. I, II, 247.
- Liese, A., effect of circulation on time factors in excitability, III, 128.
- Lifschitz, I., dissymmetrical synthesis in the case of complex metallic salts. III, I, 212. Relative dissymmetric synthesis and rotation dispersion in cobaltic complexes of the α -amino-acids. I, 533.
- Lifschitz, I., and Bos, J. G., optically active isoamarines, II, 390.
- Bos, J. G., and Dijkema, K. M., coordination power of phenylethylenediamines. I. Para- and dia-magnetic tetramminonickel salts, I, 624.
- and Froentjes, W., constitution, optical activity, and photochemical behaviour of platinum complexes, II, 252.
- and Schonteden, F. L. M., complex metallic compounds of optically active α -amino-acids, II, 248.
- Lifschutz, H., complete Geiger-Müller counting system, I, 160.
- and Duffendack, O. S., counting losses in Geiger-Müller counter circuits and recorders, I, 5. Scaling circuits in recording random counts, I, 281.
- See also Duffendack, O. S.
- Light, J. See Kajdi, L.
- Light, R. F., Schultz, A. S., Atkin, L., and Cracas, L. J., excretion of vitamin-B₁ in urine and faeces, III, 164.
- See also Schultz, A. S.
- Lightbody, H. D., and Calvery, H. O., variations in the arginase concentrations in the livers of white rats caused by administration of arsenic and lead, III, 413.
- and Kleinman, A., variations produced by food differences in concentration of arginase in livers of white rats, III, 849.
- Lightfoot, C. C. See Duncan, C. W.
- Lignac, G. O. E., syndrome consisting of affections of the kidney, stunted growth, rickets, and disturbed cystine metabolism, III, 406.
- and Teunissen, P. H., lipoidosis phosphatidica, III, 297.
- Liliencron, F. von, protein-sparing effect of glycine in [feeding of] growing sheep, III, 161.
- Lilienthal, A. T., linear crystallisation velocity of water, I, 184.
- Liljestrand, G., Lysholm, E., and Nylin, G., immediate effects of muscular work on stroke and heart volume in man, III, 18.
- Lysholm, E., Nylin, G., and Zachrisson, C. G., normal heart volume in man, III, 656.
- See also Euler, U. S. von.
- Lille, R., oxidation of magnetite; variation of the rate of oxidation at the Curie point, I, 498.
- Lilleland, O., duration of life without food in *Drosophila pseudo-obscura*, III, 695.
- Lillie, H. I., practical physiology of the nose, III, 375.
- Lillie, R. D., solubility of haemosiderin in acids and other reagents during and after various fixations, III, 958.
- and Earle, W. R., use of Janssen's iron haematoxylin in place of the Weigert acid iron chloride haematoxylin, III, 644.
- Lilly, V. G., and Leonian, L. H., vitamin-B₁ in soil, III, 703.
- See also Leonian, L. H.
- Lim, R. K. S. See Chang, H. C.
- Lima, C. See Souto, A. B.
- Lima, J. See Liberalli, C. H.
- Lima, L. R., device facilitating administration of capsules to animals, III, 716.
- Limanowski, W., bi- and ter-valent silver compounds, I, 36.
- Limarzi, L. R. See Pearlman, M. D.
- Limbacher, H. P. See Brown, J. B.
- Limberg, E. L. See Lvov, S.
- Limburg, H., pseudo-pregnancy and Aschheim-Zondek reaction, III, 687.
- Lin, C. K., structure and absorption [spectra] of benzoylbenzoic acid and its derivatives, II, 25.
- See also Kronfeld, P. C.
- Lin, C. Y., and Tsai, C., relative diffusibility of carbon dioxide and oxygen through various animal membranes, III, 868.
- See also Tsai, C.
- Lin, H. A. C. See Maxwell, J. P.
- Lin, I., odourless hydrogen sulphide system, I, 106. Methods of using the analytical balance, I, 581.
- Lin, K. H., and Robinson, (Sir) R., synthesis of substances related to the sterols. XXV, II, 70.
- Lin, T. M., and Dufay, J., new emission lines in the spectrum of γ Cassiopeia, I, 501.
- Linari, A., equilibrium of sodium chloride-sodium chlorate-water systems. I, 473.
- Lind, E. M., periodicity of algae in Beauchief ponds, Sheffield, III, 210.
- Lind, G., significance of blood changes in paint sprayers, III, 783.
- Lind, S. C., chemical activation by gaseous ionisation, I, 614.
- See also Lanning, F. C.
- Lindahl, P. E., additional device for avoiding sucking back with the Parnas-Wagner micro-Kjeldahl apparatus, I, 540. Decrease and increase of respiration by carbon monoxide, III, 125.
- Lindau, H. See Dahr, P.
- Lindauer, M. A., and Griffith, J. Q., jun., cerebrospinal pressure, hydrocephalus, and blood pressure in the cat following intracisternal injection of colloidal kaolin, III, 374.
- Lindberg, H. A., Wald, M. H., and Barker, M. H., renal changes after hypertonic solutions, III, 759.
- See also Wald, M. H.
- Linde, H. M. van der. See Creveld, S. van.
- Lindeboom, G. A., hippuric acid synthesis as test of liver function, III, 691.
- Lindgren, C. C. See Carl, M.
- Lindemann, E., and Finesinger, J. E., effect of adrenaline and mecholyl in states of anxiety in psychoneurotic patients, III, 130.
- Lindenberg, A. See Jacquot, R., and Polonovski, M.
- Linder, F. See Enger, R.
- Linderström-Lang, K., micro-methods in histochemistry, III, 220. Protein molecule, III, 785.
- Hotchkiss, R. D., and Johansen, G., peptide linkings in globular proteins, III, 195.
- Jacobsen, O., and Johansen, G., measurement of the deuterium content in mixtures of water and deuterium oxide, I, 213.
- and Lanz, H., jun., enzymic histochemistry. XXIX. Dilatometric micro-determination of peptidase activity, III, 98.
- and Morgensen, K. R., enzymic histochemistry. XXXI. Histological control of histochemical investigations, III, 440.
- Lindgren, A. G. H., sedimentation rate of basophil leucocytes and myelocytes, III, 891.
- Lindgren, E., air myelography, III, 833.
- Lindgren, G. See Gisselsson, L.

- Lindgren, W., succession of minerals and temperatures of formation in ore deposits of magmatic affiliations, I, 287.
- Lindhard, J., muscle contraction without tension, III, 26.
See also Buchthal, F.
- Lindholm, E., spectrum of hydrogen chloride in the photographic infra-red, I, 449.
- Lindman, K. F., magnetic permeability of nickel for Hertzian waves, I, 130. Electric waves in single and parallel wires; permeability of iron and nickel, I, 555.
- Lindner, E., and Katz, L. N., relative conductivity of tissues in contact with the heart; observations on animals with closed chests, III, 820.
See also Katz, L. N.
- Lindner, J., use of lead peroxide in microelementary analysis, II, 193.
- Berger, A., and Mignon, W., hydrindene derivatives. V. 5:6- and 6:7-Trimethylenequinoline, II, 448.
- and Hager, J., hydrindene derivatives. VI. Action of formaldehyde on, and proof of the constitution of, 6:7-trimethylenequinoline, II, 448.
- Schmitt, F., and Zaunbauer, B., hydrindene derivatives. II. Simple substitution products, II, 424.
- Sellner, J., and Berger, A., hydrindene derivatives. III. 7:8-Trimethylenequinoline and -quinoline, II, 448.
- Sellner, J., Hofmann, E., and Hager, J., hydrindene derivatives. IV. 5:6- and 6:7-trimethylenequinoline, II, 448.
- and Zaunbauer, B., course of the quinoline synthesis with tetrahydronaphthylamines; 7:8-tetramethylenequinoline, II, 448.
- Lindner, W., accumulation of digitalis and histological alteration in the heart muscle, III, 182. Cumulative action of digitalis substances, III, 613. Cumulation of genins of toxic glucosides, III, 613.
See also Jaretsky, R.
- Lindpainter, E., microscopic investigations of polymorphous substances. II, II, 319.
- Lindroth, S., and Elvegård, E., compensation process for qualitative spectral analysis, I, 221.
- Lindsay, G. A., and Hoyt, H. C., lattice constants of cerussite, I, 392.
See also Whitmer, R. M.
- Lindsay, J., and Mottram, V. H., vitamin-D in diet, III, 291.
- Lindsay, R. A. See Baker, E. M.
- Lindsey, A. J. See Johnson, W. C.
- Lindskog, G. E., changes in pulmonary volume following lobectomy for bronchiectasis, III, 461.
- Lindsley, D. B., and Hunter, J. W. S., polarity potential from human eye, III, 834.
- Linegar, C. R., Herwick, R. P., and Koppanyi, T., synergism and antagonism of drugs. III. Action of nicotine and physostigmine on sympathetic ganglia, III, 505.
See also Herwick, R. P.
- Lines, E. W. L., apparatus and technique for measuring respiratory exchange of fed sheep over periods of forty-eight hours, III, 295.
- Lineweaver, H., energy of activation of enzyme reactions; their velocity below 0°, III, 515.
See also Balls, A. K.
- Lingane, J. J., polarographic current-voltage curves with dropping amalgam electrodes, I, 325. Thermodynamic significance of polarographic half-wave potentials of simple metal ions at the dropping mercury electrode, I, 525.
- and Kolthoff, I. M., fundamental studies with the dropping mercury electrode. I. Ilkovic equation of polarographic diffusion currents. II. Migration of current, I, 325, 374.
- and Laitinen, H. A., cell and dropping electrode for polarographic analysis, I, 581.
- Linggood, F. W. See Pope, C. G.
- Lingo, S. P., and Henze, H. R., substituted ethers derived from ethylene chlorohydrin, II, 403. Synthesis of coloured derivatives of nirvanol. II. *N*-Benzylazo-compounds, II, 521.
See also Allen, B. B.
- Link, C., flower bud differentiation in relation to the photo-period, III, 801.
- Link, G. K. K., Wilcox, H. W., and Eggers, V., growth tests with extracts of *Erwinia amylovora*, *Phytophthora rhizogenes*, *Taphrina cerasi*, *T. deformans*, and *Ustilago zeæ*, III, 427.
- Linksz, A., trophic influence of the sympathetic system, III, 132.
- Linn, C. B. See Grosse, A. V.
- Linn, D. R. See Shepherd, M. I.
- Linnell, W. H., and Rigby, W., anti-malarials. I. Derivatives of 4-acetoacetyl-6-methoxyquinoline, II, 179.
See also Hartley, P.
- Linnemann, H., effect of antithyrotropic substances in experimental carbon monoxide-hyperthyroidism, III, 975.
- Linnett, J. W., infra-red and Raman spectra of polyatomic molecules. V. cycloPropane and ethylene oxide, I, 8.
- and Avery, W. H., infra-red and Raman spectra of polyatomic molecules. IV. Allene, I, 8.
See also Crawford, B. L., jun.
- Linneweh, F., ascites formation, III, 238. Regulation of serum-calcium, III, 555. Vehicular function of urinary proteins, III, 595.
- and Eitel, M., depot insulin therapy in children, III, 51.
See also Urbach, E.
- Linneweh, W., specific dynamic action of protein, III, 706.
- Linstead, R. P., phthalocyanines and allied compounds, II, 347.
- and Walpole, A. L., fused carbon rings. XVI. Stereoisomerism of the perhydrophenanthrenes; preliminary investigations. XVII. Stereoisomerism of the perhydrodiphenic acids and an examination of the Blanc rule, II, 307, 322.
- Lintgen, C., and Fry, K., sedimentation test in the differential diagnosis of acute pelvic inflammatory disease and acute appendicitis, III, 449.
- Linton, R. W., Mitra, B. N., and Seal, S. C., electrophoresis and metabolism of vibrio strains in relation to variability and chemical classification, III, 334.
- Shrivastava, D. L., Seal, S. C., and Mookerji, S. P., specific polysaccharides of the vibrios. II. Chemistry and serology, III, 207.
- Lintott, G. A. M., practical application of gastroscopy, III, 592.
See also Douthwaite, A. H.
- Lintzel, W., protein metabolism of farm animals, III, 854.
- Pfeiffer, H., and Zippel, I., trimethylamine oxide in the muscle of freshwater fish, III, 826.
- Linzbach, A. J. See Symeonidis, A.
- Lion, K. S., extinction of thyatron tubes by alteration of grid potential, I, 222.
- Lions, F., heterocyclic compounds derived from pyrocatechol ethers. I. Derivatives of 6:7-dimethoxyquinoline, II, 179. Synthetic substances allied to strychnine, II, 181.
- and Ritchie, E., stereochemistry of tervalent nitrogen, II, 449.
- and Willison, A. M., nitration of 2-methoxydiphenyl ether, II, 154. Bromination of 2-methoxydiphenyl ether, II, 475.
- See also Birch, A. J., Cornforth, J. W., Graves, J. N., Haradence, (Miss) R. H., Hazlewood, S. J., and Hughes, G. K.
- Liosner, L. D., and Woronzowa, M. A., transplantation of tail elements into a limb in *Amblystoma*, III, 347.
- Lipetz, B. See Himwich, H. F.
- Lipinski, F. See Niewodniczański, H.
- Lipkin, D. See Marks, E. M.
- Lipkind, M. See Pett, L. B.
- Lipman, E. See Mettler, F. A.
- Lipmann, F., flavin component of the pyruvic acid oxidation system, III, 516. Coupling between pyruvic acid dehydrogenation and adenylic phosphorylation, III, 519. Role of phosphate in pyruvic acid dehydrogenation, III, 1100.
- and Perlmann, (Miss) G., hydrogenation of vitamin-B₁ and other quaternary thiazoles, II, 40.
- Liposits, E. See Donhoffer, S.
- Lippard, V. W., and Schmidt, W. M., passive transfer antibody in children hypersensitive to foods, III, 1091.
See also Schmidt, W. M.
- Lippay, F., pigment in striated muscle of the toad, III, 463. Complex excitability of skeletal muscle stimulated electrically from its ends, III, 565.
- Lippelt, H., and Mohr, W., diagnosis of filarial infections, III, 328.
- Lippincott, S. B., and Hass, H. B., action of mineral acids on primary nitro-paraffins, II, 96.
- Lippincott, S. W. See Hwang, J. M. S., and Krumbhaar, E. B.
- Lippmann, E., and Dachà, U., nitrogen: sulphur ratio in white rats fed with L-cystine, III, 81.
- Lippross, O., use of male sex hormones, III, 53.
- Lipschitz, W. L., and Bueding, E., mechanism of biological formation of conjugated glycuronic acids, III, 855.
- Lipschütz, A., anti-tumorigenic action of progesterone, III, 1056.
- and Iglesias, R., uterine and extragenital tumours produced by oestradiol benzoate, III, 263.
- Murillo, R., Vargas, L., jun., and Koref, O., anti-tumorigenic action of the ovary, III, 990.
- Rodriguez, F., and Vargas, L., jun., hysterotropic and carcinogenic activities of oestron and oestradiol, III, 755.
- and Vargas, L., jun., comparison of the carcinogenic action of oestrogens, III, 492. Protective action of the ovary against tumour production, III, 685.

- Lipschutz, A., and Vargas, L., *jun.*, oestrogens and experimental tumorigenesis, III, 989. Quantitative study of tumorigenic effects of oestradiol, III, 989.
- Vargas, L., *jun.*, and Iglesias, R., microscopic structure of tumours produced by oestradiol benzoate, III, 263. Regression of experimental fibromyomas during oestradiol deficiency, III, 981. See also Jedlicky, A., Koref, O., and Vargas, L., *jun.*
- Lipson, H. See Bradley, A. J.
- Lipstein, S. See Taran, A.
- Lisbonne, M., Seigneurin, R., and Renoux, G., physico-chemical nature of the bactericidal action of mercury, III, 1015.
- Lisenko, G. A. See Jerusalimski, B. M.
- Lisi, F., itching—it's peripheral mechanism, III, 128.
- Liso, A., change in rate of growth of galls of *Ceutorrhynchus sulcicollis* due to X-irradiation, III, 784.
- Lison, L., excretion and deposition of haemoglobin in the amphibian kidney, III, 275. Structure and physiology of the Malpighian tubules in the potato beetle (*Leptinotarsa decemlineata*, Say), III, 486. Excretion of acid dyes in *Cyclops* studied by micro-injection, III, 488. See also Fautrez, J.
- Lissák, K., effect of calcium on output of sympathin in the frog's heart, III, 19. Adrenaline-like substance in postganglionic sympathetic fibres, III, 252. Influence of piperidinomethylbenzodioxan [933 F.] on the action of sympathin, III, 252. Effects of extracts of adrenergic fibres on frog heart, III, 833.
- and Hodes, B. R., sympathetic nervous system and anaphylactic shock, III, 371.
- and Kokas, F., action of histamine on the frog heart, III, 311.
- and Rex, K. B., influence of monoiodoacetic acid on the mineral metabolism of parathyroidectomised, tetanus toxin- and strychnine-poisoned dogs, III, 301. See also Cannon, W. B., Luco, J. V., and Morison, R. S.
- Liszenko, A. F. See Korschak, V. V.
- Lisser, H. See Canelo, C. K., and Reilly, W. A.
- Lissmann, H. W. See Gray, J.
- List, C. F., and Peet, M. M., sweat secretion in man. II. Anatomic distribution of disturbances in sweating associated with lesions of the sympathetic nervous system. III. Clinical observations on sweating produced by pilocarpine and mecholyl. IV. Sweat secretion of the face and its disturbances, III, 252.
- Lister, M. W., and Sutton, L. E., electron diffraction investigations of trimethylamine oxide and dimethyl sulphone and their bearing on the lengths of co-ordinate links, I, 307. See also Brockway, L. O., and Ewens, R. V. G.
- Litchfield, J. T. See Marshall, E. K., *jun.*
- Litkenhous, E. E., hydrogenation of nickel carbonyl, I, 529.
- Lits, F. J., Kirschbaum, A., and Strong, L. C., action of colchicine on a transplanted malignant lymphoid neoplasm in mice of the C3H strain, III, 280. See also Newton, W. H.
- Littardi, A., and Zanichelli, A., methaemoglobin formation by sodium chlorate. I. and II., III, 814.
- Littauer, D., and Wright, I. S., papaverine hydrochloride as a vasodilator, III, 862.
- Litter, L., Litvak, A. M., and Givan, T. B., use of sulphapyridine in treatment of pneumonia complicating pertussis, III, 999.
- Little, C. C., Murray, W. S., and Cloudman, A. M., genetics of non-epithelial tumour formation in mice, III, 989. See also Mowat, J. H., and Woolley, G.
- Little, E. M., liquid versus vapour temperature, I, 310.
- Little, J. L., factor of heredity in hare-lip, III, 955.
- Little, M. G. A., and McSwiney, B. A., afferent fibres from diaphragm, III, 128.
- Little, M. H. See Greey, P. H.
- Littwiler, R., quantitative studies on nerve regeneration in amphibia. I. Factors controlling nerve regenerations in adult limbs, III, 369.
- Litvak, A., intercellular substances formed in cultures *in vitro*, III, 2.
- Litvak, A. M. See Litter, L., and Rauch, S.
- Litvan, F., and Robinson, (Sir) R., experiments on the synthesis of substances related to the sterols. XXIII. Formation of oestrone from a dicarboxylic acid obtained by degradation of oestrone methyl ether, II, 75.
- Litzka, G. See May, H., and Zahler, H.
- Liu, H. C. See Adolph, W. H.
- Liu, J. H., and Hsü, Y. H., paralysis of the vocal cords: review of 36 cases, III, 38.
- Liu, S. C., and Wu, H., isolation of anti-crystalline ovalbumin precipitin from rabbit's serum, III, 531. Mechanism of recovery of antibody from the immune precipitate, III, 531. Optimal conditions for recovery of antibody from immune precipitate of type I pneumococcus, III, 1102.
- Liu, S. H., pathological states produced by administration of posterior pituitary pressor principle, III, 1048.
- and Noble, R. L., effects of extracts of pregnant mare serum and human pregnancy urine on the reproductive system of hypophysectomised female rats, III, 1054. See also Dodds, E. C., and Snapper, I.
- Liu, W. T. See Chu, H. I.
- Lium, R., and Porter, J., colonic explants in dogs; relation of muscular spasm to ulcerative colitis, III, 484. Aetiology of ulcerative colitis, III, 690. See also Wright, R. D.
- Liutenberg, A. I. See Uschakov, M. I.
- Livesey, R. J. See Boyd, E. M.
- Livieratos, S. S., blood-glutathione and thyroid activity, III, 138. See also Binet, L.
- Livingood, J. J., and Seaborg, G. T., radioactive isotopes of iodine, I, 54. Radioactive isotopes of zinc, I, 232. Radioactive antimony from I+n and Sn+D, I, 233. Radioactive tin, I, 295. Long-lived radioactive ⁵⁶Fe, I, 443. See also Seaborg, G. T.
- Livingston, M. S., and Hoffman, J. G., neutron absorption limit in cadmium, I, 53. Holloway, M. G., and Baker, C. P., capillary ion source for the cyclotron, I, 221.
- Livingston, P. C., analysis of judgment of relative position, III, 1043.
- Livingston, R., and Horwitz, W., calorimeter, I, 579.
- Livingston, S. See Kurzrok, L.
- Livingston, W. K., phantom limb pain: ten cases treated by injections of procaine hydrochloride near the thoracic sympathetic ganglia, III, 252.
- Lizius, J. L., and Allmand, A. J., simultaneous sorption of carbon disulphide and water vapour by activated charcoals, I, 139.
- Ljaschenko, V. I., and Fedorus, G. A., high-voltage polarisation in cuprous oxide and selenium at low temperatures, I, 404.
- Ljubimowa, M. N. See Engelhardt, W. A.
- Ljubin, B. O. See Obergard, I. A.
- Glacer, A. J., micro-determination of mercury in organic liquids and tissues. I. Determination in urine, III, 1020.
- Llewellyn, F. J. See Dothie, H. J.
- Llewellyn, G. F. See Hartley, P. H.
- Llewellyn-Jones, M. See Glenny, A. T.
- Lloyd, D. K. See Kline, B. S.
- Lloyd, D. P. C., excitability states of inferior mesenteric ganglion cells following preganglionic activation, III, 666. Origin and nature of ganglion after-potentials, III, 833. See also Goodwin, J. E.
- Lloyd, E., extraction of human placenta, III, 687.
- Lloyd, E. H., and Penney, W. G., critique of the pair theory of mesomerism, I, 511.
- Lloyd, V. E., Erskine, D., and Johnson, A. G., chemotherapy of gonorrhoea with M. & B. 693, III, 178.
- Lloyd, W. R. See Jacobs, M. L.
- Lobanow, M. See Birstein, G.
- Lobato, A. S., ascorbic acid in orchids, III, 1072.
- Lobb, D. E. See McKee, M. C.
- Lobitz, C. See Ebertz, E. G.
- Lobitz, W. C., *jun.* See Ebertz, E. G.
- Lobo, R., microcrystalline reaction for detection of mercury, I, 99.
- Lobunetz, M. M., determination of nitro-sulphonic acids, using zinc amalgam, II, 44. See also Perrier, M. I.
- Loealis, S. A. See Bruger, M., and Dobriner, K.
- Lochhead, A. G. See Garrard, E. H.
- Lock, G., "steric hindrance" in the reactions of aromatic aldehydes, II, 161. and Bayer, E., Perkin's cinnamic acid synthesis, II, 319. and Rodiger, E., fission of ketones by alkalis. III. Benzophenones, II, 268. and Schreckeneder, R., fission of ketones with alkalis. II. Bromo-, methyl-, and nitro-acetophenones, II, 215. and Stitz, F., "oxidising" actions of alkalis. V. Cresols, II, 113.
- Locke, A., Main, E. R., and Mellon, R. R., anti-catalase and the mechanism of sulphanilamide action, III, 303.
- Lockenvitz, A. E., radiometer-type vacuum gauge, I, 105.
- Lockett, J., and Short, W. F., syntheses in the phenanthrene series. X. 8-Methoxy-1-methylphenanthrene, II, 314.
- Lockhart, E. E., diaphorase (co-enzyme factor), III, 625. See also Potter, V. R.
- Lockhart, J. C. See Soley, M. O.
- Lockhead, M. S. See Perry, I. H.
- Lockwood, H. C., determination of arsenic by continuous electrolytic method, I, 577.

- Lockwood, J. E. See Griffith, F. R., jun.
- Lockwood, J. S., Coburn, A. F., and Stokinger, H. E., mechanism of action of sulphanilamide, III, 303.
See also Flippin, H. F.
- Lockwood, L. B., Stubbs, J. J., and Senseman, C. E., biochemistry of *Fusaria*, III, 522.
- Lockwood, W. H. See Lemberg, R.
- Lode, A. See Wanag, G.
- Loe, F., sulphanilamide treatment of trachoma, III, 176.
- Loeb, L., and Kirtz, M. M., effects of transplants of anterior lobes of hypophysis on growth of mammary gland and development of mammary gland carcinoma in various strains of mice, III, 764.
- and Simpson, R. M., effects of age and hormones on the stroma of thyroid and mammary gland in the guinea-pig, III, 256.
- Suntzeff, V., and Burns, E. L., effect of age and oestrogen on the stroma of vagina, cervix, and uterus in the mouse, III, 262. Growth processes induced by oestrogenic hormones in the uterus of the mouse, III, 383. Changes in the nature of the stroma in vagina, cervix, and uterus of the mouse produced by long-continued injections of oestrogen and by advancing age, III, 698.
See also Hayward, S. J.
- Loeb, L. B. See Beckman, J. W.
- Loeb, L. M., and Greenebaum, R. S., beriberi secondary to hernia of the mesentery, III, 851.
- Löbering, J., kinetics of polymeric aldehydes. X. Course of reaction in the system polyoxymethylene-concentrated formaldehyde solution, I, 32. Polymerisation process in a medium with continuously varying discontinuities, I, 476.
- and Staunig, K., viscosimeter for investigation of action of radiation on sols, I, 105.
- Loeber, J. B., effect of pH on growth and morphology of *Paramecium bursaria*, III, 201.
See also Hall, R. P.
- Loeffler, L., genesis of infarction, III, 965.
- Loeffler, O. H. See Gibson, R. E.
- Löffler, W., diseases of the pancreas, III, 387.
- Hegglin, R., and Maier, C., action of antipneumococcal serum and sulphapyridine on lobar pneumonia, III, 1082.
- Löfvendahl, H., problem of neurosis, III, 667.
- Loehner, C. A., therapeutic effect of adrenal cortex extract on the psychotic patient, III, 43.
- Loeper, J. See Loeper, M.
- Loeper, M., Cottet, J., Vignalou, J., and Parrod, J., effect of sodium thiosulphate on hypertension caused by tyramine, III, 1085.
- Lemaire, A., Cottet, J., and Vignalou, J., experimental variations in the elimination of tyramine, III, 996.
- and Lesure, A., biliary elimination of amino-bases in man, III, 987.
- Loeper, J., Lemaire, A., Cottet, J., and Parrod, J., disappearance of physiological action of tyramine on combination with sulphur, III, 84.
- and Perreau, P., anaemia of Bright's disease, III, 447.
- Lörinczi, K. See Gerö, L.
- Loeschke, A., pathogenesis of von Gierke's disease, III, 297.
- Loesecke, H. W. von. See Nolte, A. J., and Pulley, G. N.
- Loeser, A., action of ethers of thyroxine, di-iodothyronine, and di-iodotyrosine, III, 40. Ovary, tube, and uterus as a functional unit, III, 55. Therapeutic trials of diethylstilboestrol, III, 264. Action of diethylstilboestrol, III, 589. and Erbacher, K., pharmacology and toxicology of synthetic oestrogenic substances, III, 686. and Trikojus, V. M., pharmacology of thyroxinamine, III, 840.
See also Arnold, O., and Grumbrecht, P.
- Loeser, L. H., cutaneous histamine reaction as a test of peripheral nerve function, III, 28.
- Lövenskiöld, H., [vitamin-A and -D content of] seal oil, III, 1069.
- Lövgren, N., qualitative analysis of the arsenic-tin group, I, 220.
- Loew, E. R., and Patterson, T. L., reflex influence of rectum on tonus and movements of stomach, III, 691.
- Low, I. See Grundmann, C., and Kuhn, R.
- Loewe, S., ejaculation induced by drug action, III, 89. Bio-assay of laxatives on rhesus monkeys and lower mammals (dye-meal methods), III, 1003.
- Loewe-Lyon, S., gastric hæmorrhages of the suckling child, III, 62.
- Loewenstein, E., new baby balance [for measuring insensible perspiration], III, 171.
- Löwenstein, W., action of local administration of heat and cold on gastric secretion, III, 591.
- Loewenthal, H., combined serum and sulphanilamide, III, 302.
- Loewenthal, J. A., assessment of nutritional state of natives of Uganda, III, 396.
- Loewi, O., and Hellauer, H., comparison of acetylcholine yield from frog's central nervous system on extraction with alcoholic hydrogen chloride and trichloroacetic acid, and on boiling, III, 471.
- Loewinson-Lessing, F., classification and nomenclature of igneous rocks. II, I, 226.
- Loewy, G., effect of ligation of hepatic duct on protein and amino-acid content of serum, III, 914. Effect of loss of pancreatic digestion on protein and amino-nitrogen content of blood, III, 914.
- Lofffield, R. B., and Swift, E. jun., stability of dry potassium ferrocyanide, I, 90.
- Logan, A. H., and Brown, P. W., intestinal infantilism as a result of regional enteritis, III, 64.
- Logan, C. E. See Traut, E. F.
- Logan, M. A. [with O'Connor, P.], early effects of parathyroid hormone on blood and urine, III, 579.
and Kane, L. W., solubility of bone salt. IV. Solubility of bone in biological fluids, III, 488.
- Logemann, W., preparation of constituents of the adrenal cortex and related substances; β - Δ^4 -pregnene-17:20:21-triol-3-one, II, 270.
See also Serini, A.
- Lohlich, K., unusual form of delusions occurring in bromide psychosis, III, 374.
- Lohmann, H., reaction of ethylene oxides with pyridine derivatives, II, 280.
See also Kleinfeller, H.
- Lohmann, R., biology of inflammation, III, 355.
- Loicq, R. See La Barre, J.
- Loiseau, G., and Philippe, M., diphtheria toxin, III, 794.
- Loiseleur, J., specific antitoxic power of venom "contra-antigens," III, 105. Non-toxicity of "contra-antigens," III, 105. Transformation of antigen into specific "contra-antigen," III, 209. Flocculating power of "contra-antigens," III, 209. Mechanism of action of tryptic enzymes, III, 787. Antitoxic power of viper contra-antigen, III, 948.
- and Nyka, W., changes in viscosity of mixtures of specific serum and antigen during serum- and egg-anaphylaxis in rabbits, III, 10.
- Loisy, R., commercial active charcoal; influence of humidity on velocity of adsorption of chloropicrin, I, 33.
- Lolkema, J. See Backer, H. J.
- Loman, J., Greenberg, B., and Myerson, A., human autonomic pharmacology, III, 507.
- Lesses, M. F., and Myerson, A., effect of mecholyl on arterial hypertension, III, 505.
- Loman, R., critical considerations on the wetting of capillaries by liquids. I, I, 368.
- Lombard, C. See Pierre, M.
- Lombard, C. F., and Nelson, C., apparatus for oxygen therapy, III, 563.
- Lombard, R., pyroabietic acids, II, 334.
- Lombert, M. I. See Vulliamy, K. S.
- Lombroso, C., and Cera, B., metabolism and oxidoreductions. III. Dehydroascorbic acid/ascorbic acid ratio at low metabolic levels, III, 76.
- Lombroso, U., absorption from the alimentary canal; proteins, III, 64.
and Martini, V., hypertension due to stimulation of the central vagus and sympatholytic drugs, III, 896.
- Lomholt, S., action of the "Intensol" lamp in various skin diseases, III, 318.
- Lominski, J., non-active lysogenic strains (cryptolysogens), III, 334. Fixation of bacteriophages and lysogenic cultures, III, 728. Ageing of bacteriophage filtrates, III, 878.
and Krassnoff, D., spontaneous agglutination of bacteriophage corpuscles, III, 432.
See also Levaditi, C.
- Lommel, F., traumatic diabetes mellitus, III, 754.
- London, E. S., and Kotschnev, N., carbohydrate metabolism of various organs, III, 608.
- London, F., Bose-Einstein condensation, I, 56. State of liquid helium near absolute zero, I, 133. Molecular oscillators in aromatic molecules, I, 454.
- London, H., thermodynamics of the thermomechanical effect of liquid He II, I, 557.
See also Appleyard, E. T. S.
- London, M., combined oral and subcutaneous treatment for ragweed pollinosis, III, 1090.
- Loneragan, R. E., and Paskind, H. A., quinine in myotonia congenita, III, 244.
- Long, A. P., McKhann, C. F., and Cheney, J. L., hospital infections. II. Nasopharyngeal flora and disease of respiratory tract in infants, III, 1101.

- Long, C., Ochoa, S., and Peters, R. A., pyruvate oxidation in brain, not involving succinate cycle, III, 750.
and Peters, R. A., pyruvate oxidation in brain. V. Evidence derived from metabolism of α -ketobutyric acid, III, 709.
- Long, C. N. H. See Shipley, R. A.
- Long, E. A. See Libby, W. F.
- Long, F. A., interchange between chromi-oxalate ion and oxalate ion, using radio-carbon, I, 274.
See also Charlesworth, G.
- Longbridge, M. L. See Bischoff, F.
- Long, P. H., Bliss, E. A., and Feinstone, W. H., action, clinical use, and toxic manifestations of sulphanilamide, III, 502.
and Feinstone, W. H., absorption and excretion of sulphapyridine, III, 411.
See also Adams, R., Bliss, E. A., and Marshall, E. K., jun.
- Longbridge, D. H. See Trueblood, H. C.
- Longenecker, H. E., deposition and utilisation of fatty acids. I. Fat synthesis from high-carbohydrate and high-protein diets in fasted rats. II. Non-preferential utilisation and slow replacement of depot fat consisting mainly of oleic and linoleic acids; fatty acid analysis of corn oil, III, 707, 854. Deposition and utilisation of fatty acids of low mol. wt.; fatty acid analysis of coconut oil, III, 997.
See also Musulin, R. R.
- Longinescu, G. G., performance of gravimetric analyses by direct precipitation in Jena filter crucibles, I, 282.
- Longley, B. J. See Kuhs, M. L.
- Longworth, L. G., modification of the Schlieren method for use in electrophoretic analysis, I, 222.
and MacInnes, D. A., transference numbers of lanthanum chloride at 25° by the moving boundary method, I, 83. Ion conductances in water-methanol mixtures, I, 201.
- Longtin, B. See Randall, M.
- Longuet, (Mlle.) J. See Forestier, H.
- Lonsdale, K., diamagnetic anisotropy of organic molecules, I, 554.
See also Knaggs, I. E.
- Lonstein, I. See Goettsch, M.
- Loofbourov, J. R., Cook, E. S., Dwyer, C. M., and Hart, M. J., production of intercellular hormones by mechanical injury, III, 1097.
and Dwyer, C. M., relative consistency of weights and counts in determining micro-organism populations by photo-electric nephelometer, III, 634. Production of intercellular hormones, III, 790.
- Dwyer, C. M., and Morgan, M. N., intercellular wound hormones from ultra-violet-injured cells, III, 627.
and Morgan, M. N., effect of respiratory and growth-stimulating factors from yeast and malt combings on bacterial growth, III, 633.
- Loomis, E. See Gaunt, R.
- Loomis, F. W. See Kusch, P.
- Loomis, W. E., composition of drought-injured maize plants, III, 212. Relation of polymerisation reactions to meristematic development [of plants], III, 802.
- Looney, J. M., tyrosine determination, III, 440. Determination of serum-phosphatase and its clinical significance, III, 893.
- Looney, J. M., Jellinek, E. M., and Dyer, C. G., insulin treatment of acute schizophrenia. II. Blood minerals, III, 976.
and Walsh, A. I., determination of [cerebro]spinal fluid-protein with the photo-electric calorimeter, III, 374.
See also Alexander, L., Jellinek, E. M., and Randall, L. O.
- Loos, D., Simmonds' disease, III, 1045.
- Loosanoff, V. L., spawning of *Ostrea virginica* at low temperatures, III, 479.
- Loosli, C. G., structure of the respiratory portion of the mammalian lung; lining of the frog lung, III, 23.
- Lorber, V., rôle of respiratory obstruction in "neuropathic" pulmonary oedema following vagotomy, III, 968.
- Lord, J. W., jun., Andrus, W. DeW., and Moore, R. A., effect of transfusion on plasma-prothrombin, III, 1027.
- Lorenz, A. J., and Arnold, L. J., standardisation of 2,6-dichlorophenol-indophenol with ferrous compounds, III, 168.
- Lorenz, E., avitaminosis-A and thrombocytes, III, 73.
See also Shear, M. J.
- Lorenz, F. W., Chaikoff, I. L., and Entenman, C., endocrine control of lipin metabolism in the bird. II. Effects of œstrin on blood-lipins of the immature domestic fowl, III, 298.
See also Entenman, C.
- Lorenz, H., apparatus for production of visible electron motion in rock-salt and sylvine crystals, I, 581.
- Lorhan, P. H., determination of acetone in expired air, III, 367.
- Lori, F., magnetism and magnetic substances, I, 361.
- Loring, H. S., properties of the latent mosaic virus protein, III, 336. Nucleic acid of tobacco mosaic virus, III, 1105.
- Lauffer, M. A., and Stanley, W. M., aggregation of purified tobacco-mosaic virus, III, 208.
See also Lavin, G. I.
- Loritsch, J. A., and Vogt, R. R., substituted acetvlens and their derivatives. XXXIV. Addition of arylamines to alkenenes, II, 415.
- Lortie, (Mlle.) M. See Warnecke, R.
- Losana, L., change of volume of the elements in the act of fusion. II., I, 182.
- Loschkarev, M., potentials of zinc and cadmium in solutions of foreign ions, I, 266.
Essin, O., and Sotnikova, V., polarisation in deposition of tin from acid solutions of its simple salts, I, 614.
See also Essin, O.
- Lossie, H. See Schmitt, Frida.
- Lothrop, W. C., structure of fluorene, II, 502.
- Lotspeich, E. See Simon, F. A.
- Lott, W. A., and Christiansen, W. G., relation between chemical constitution and local anaesthetic activity. III. Substituted cinnamic esters of dialkyl-amino-alcohols. IV. Local anaesthetics containing an ephedrine-like nucleus, II, 504.
- Loubatières, A., permanent glycosuria in dogs following injections of anterior pituitary extracts, III, 974.
and Monnier, P., variations in liver-glycogen and -lipins produced in the same dog by pancreatotomy followed by administration of insulin, III, 843.
See also Hédon, L.
- Loudette, G. See Destriau, G.
- Loudon, J. D., mobility of groups in 3-chloro-4-nitro- and 5-chloro-2-nitro-diphenylsulphones, II, 314.
and Shulman, N., thermal decomposition of chloromercuric β -ethoxyethanesulphonate, II, 353.
- Lough, S. A., and Spencer, V. E., preparation of calcium glucose-3-phosphate from dibrucine glucose-3-phosphate, II, 146.
- Lougheed, D. W., Jones, J. M., and Hall, G. E., experimental asphyxia and drowning, III, 823.
See also Banting, F. G.
- Louis, C., and Moore, (Mlle.), arterial anomaly of the arm, III, 955.
- Louis, H. L. See Leuchs, H.
- Louis, P. See Cornubert, R.
- Louis, V., and Franck, H. H., calcium silicides, I, 621.
See also Franck, H. H.
- Lourau, M., De Sacy, G. S., and Arthus, A., blood regeneration produced by a water-soluble liver factor in experimental plumbism, III, 646.
- Louvier, R., and Serfaty, A., catalase content of the blood of normal domestic cocks and hens, III, 321, 1030.
- Love, J. G. See Eaton, L. M.
- Love, J. G. See Baggenstoss, A. H., Wagener, H. S., and Walsh, M. N.
- Lovelace, W. R., technique of treatment with helium and oxygen using B.L.B. inhalation apparatus, III, 315.
- Mayo, C. W., and Boothby, W. M., aero-otitis media, III, 574.
- Lovell, A. C. B., shower production by penetrating cosmic rays, I, 547.
- Lovell, E. L., and Hibbert, H., spectrographic and chemical examination of unsaturated alcohols and their dehydration products. LIX. Precipitability of pure hemicolloidal polyoxyethylene glycols, II, 402.
See also Fordyce, R.
- Lovell, R., *Corynebacterium pyogenes* antitoxin content of animal sera, III, 1012.
- Lovell, W. G. See Glasebrook, A. L.
- Lovelock, F. J. See Ralli, E. P.
- Loveman, A. B., and Simon, F. A., fixed eruption and stomatitis due to sulphanilamide, III, 1083.
- Lovera, G., ionisation by vaporisation, I, 181.
- Loving, T. S., and Goddard, H. N., broader structural relations of the ore deposits of Central City and Idaho Springs, Colorado, I, 344.
- Lovern, J. A., body fats of sea birds, III, 155.
- Mead, T. H., and Morton, R. A., halibut intestinal oil, III, 399.
- and Morton, R. A., distribution of vitamins-A and -A₂. III., III, 399.
- Morton, R. A., and Ireland, J., distribution of vitamins-A and -A₂. II., III, 399.
- Lovibond, J. L., and Steel, G. C., picrotoxin in barbiturate poisoning, III, 1087.
- Low, A. W. See Iddles, H. A.
- Low, G. W., jun., and Fryde, E. H., concentration cell in quantitative analysis. II. Determination of fluoride, I, 533.
- Lowan, A. N., and King, F., evaluation of the earth's temperature arising from radioactivity, I, 162.
- Lowdon, A. G. R., McKail, R. A., Rae, S. L., Stewart, C. P., and Wilson, W. C., sodium and other constituents of blood and extracellular fluids following scalds, III, 819.

- Lowe, R. C., alimentary lipamia in young diabetics with evidence of liver damage, III, 771.
- Lowe, T. E., significance of myocardial scars in human heart, III, 821.
- Lowell, F. C. See Finland, M.
- Lowenberg, H., presence of synarmotical cell in cerebellum of birds, III, 667.
- Lowman, A., precipitate dryer, I, 582.
- Lowrie, L. See Foster, D. P.
- Lowry, A. See Albert, W. C., and Ber-
man, N.
- Lowther, S. See Murphy, R.
- Lowy, A. See O'Brochta, J.
- Lozner, E. L., Kark, R., and Taylor, F. H. L., clot-promoting activity in hamophilia of Berkefelded normal human plasma free from fibrinogen and prothrombin, III, 959.
- Pohle, F. J., and Taylor, F. H. L., intramuscular use of monoethanolamine salt of ascorbic acid in patients with vitamin-C deficiency, III, 921.
- Lozovoi, A. V., Djakova, M. K., and Stepanova, T. G., physical constants of hydrocarbon mixtures. II, I, 516.
- See also Djakova, M. K.
- Lu, C. S., and Sugden, S., chemical methods of concentrating radioactive halogens, I, 532.
- See also Le Roux, L. J.
- Lu, G. D., metabolism of pyruvic acid in normal and vitamin-B₁-deficient states. I. Determination of blood-pyruvate. II. Blood-pyruvate in rat, pigeon, rabbit, and man. III. Relationship of blood-pyruvate to cardiac changes, III, 540, 702.
- and Needham, D. M., metabolism of pyruvic acid in normal and vitamin-B₁-deficient states. VI. Fate of injected pyruvate in the rabbit, III, 1078.
- See also Needham, D. M., and Platt, B. S.
- Lu, S. S., Hung-Chi, C., and Ta-Yuan, L., influence of pressure on photographic sensitivity to X-rays, I, 378.
- Lub, (Miss) W. A., isotopic constitution of nickel and chromium, I, 231.
- Lubbock, D. M. See Thomson, A. M.
- Lubin, A. J., and Faber, H. K., nervous system in acrodynia, III, 34.
- Lubjuhn, H. See Chrometzka, F.
- Lubosch, W., general questions in connexion with the branchial musculature, III, 805.
- Lucadou, W. von, morphology of adrenals, III, 138.
- Lucas, C. C., human response to single doses of sulphanilamide, III, 305.
- and Dolan, M. E., solubility of quartz and silicates, I, 365.
- and Mitchell, D. R., biochemical study of patients on sulphanilamide therapy, III, 611.
- See also Greey, P. H., and Mitchell, D. R.
- Lucas, G. H. W., and Bonnycastle, D. D., action of adrenaline on the intestine, III, 44.
- Lucas, H. J. See Pressman, D., and Winstein, S.
- Lucas, R., thermal expansion of liquids, I, 67. Mechanism of fusion, I, 133. Thermal agitation waves in liquids, I, 183.
- Lucatu, E., relation between vapour pressure, viscosity, and molecular association, I, 135.
- Lucchesi, P. F. See Habel, K.
- Lucchi, E. See Betti, M.
- Luce, F. See Gueffroy, W.
- Luce-Clausen, E. M., clinical aspects of ultra-violet therapy, III, 194.
- See also Hodge, H. C.
- Lucia, S. P., and Aggeler, P. M., heparin and blood coagulation mechanism, III, 816.
- Luciani, F., fixation in organs and tissues of colloidal calcium triphosphate in the rabbit, III, 188.
- Luciano, F. A. See Levin, C. M.
- Lucic, H., uveal tissue sensitisation in rabbits by synergic action of staphylo-
toxin, III, 903.
- Luck, J. M. See Thomas, L. E.
- Lucké, B., carcinoma in the leopard frog: its probable causation by a virus, III, 158.
- Lucke, H., and Wolf, J., effect of adrenal cortical extract and vitamin-C on calcium and phosphorus balance, III, 43.
- Lucker, G. D. See Swann, S., jun.
- Luckhardt, A. B. See Scott, W. W.
- Luckiesh, M., and Moss, F. K., frequency of blinking as clinical criterion of ease of seeing, III, 904.
- Luckner, H., dietary oedema, III, 161.
- and Mann, E., occurrence of allergic phenomena after exercise, III, 782.
- and Scriba, K., pathological anatomy of dietary oedema, III, 161.
- Luco, J. V., defatiguing effect of adrenaline [on skeletal muscle], III, 826.
- and Lissák, K., chemical mediators in the aqueous humour, III, 252.
- Ludány, G. von. See Goreczky, L., Illényi, A., and Kokas, E. von.
- Ludeke, C. A., interchange energy of two free electrons, I, 168.
- Luder, W. F., improved periodic table, I, 548.
- Ludford, R. J., occasional neutralisation of the active agent of filterable fowl tumours by fluid media from tissue cultures, III, 489.
- Ludlum, S. DeW. See Freed, H.
- Luduena, F. P., effect of cocaine on retractor muscle of the [dog's] penis, III, 612. Effect of cocaine and pyrogallol on the reaction of retractor muscle of penis to adrenaline or sympathetic stimuli, III, 612.
- Ludwig, C. See Adrian, E. D.
- Ludwig, C. A., availability of different forms of nitrogen to a green alga, III, 106.
- See also Allison, F. E.
- Ludwig, F., use of ovarian hormones in menstrual disturbances, III, 756.
- Ludwig, H. See Boedecker, F.
- Ludwig, Willy, and Mutzenbecher, P. von, preparation of thyroxine and mono- and di-iodotyrosine from iodinated protein, II, 369.
- Lu, Y. M., vagus-post-pituitary reflex. VII. Non-ceruleine vagus response in different vertebrates, III, 679. Myelencephalic sympathetic centre. VIII. In fish, III, 901.
- See also Chang, H. C.
- Ludi, F., theory of control by quenching grids in gas discharges, I, 502.
- Lüdin, M., X-ray diagnosis in pancreatic disease, III, 387.
- Ludtke, K. See Holtz, P.
- Ludy, W., piezoelectricity of potassium phosphate, I, 554.
- Lueg, W., and Hammann, G., [synergic] action of vitamin-C [and mercurial diuretics] in diseases of the circulation, III, 311.
- Lührmann, H. See Hertel, E.
- Luehrs, E., complement destruction by colloidal metals, III, 1107.
- Lührs, W., and Stötter, G., action of thyrotropic hormone on thyroid and basal metabolism, III, 839.
- Lueken, B., and Schütz, E., relative refractory period of the heart. IV. New action [potential] phenomenon of the heart, III, 454.
- Lueneburg, R. See Halpern, O.
- Lüsebrink, H., changes in the leucocyte count after short-wave therapy of lupus cases, III, 114.
- Lueth, H. C., use of cardiazol in complete heart block, III, 183. Massive collapse of the lung following anaesthesia, III, 315.
- Lüthi, H. R., differentiation of implants of the lethal bastard *Triton* ♀ × *Salamandra* ♂, III, 346.
- Luetscher, J. A., jun., serum-albumin. II. Identification of more than one albumin in horse and human serum by electrophoretic mobility in acid solution, III, 1095.
- Lüttringhaus, A., valency angle. II. Angle at the sulphur atom attached to phenyl, II, 337.
- and Kohlhaas, R., valency angle. IV. Determination of linking angles by chemical methods, II, 337.
- and Sääf, G. von, reaction of organo-metallic compounds. III. Scission of phenolic ethers, II, 109.
- See also Kohlhaas, R., and Pummerer, R.
- Lufkin, A. See Friedman, A.
- Lugg, J. W. H., amide, tyrosine, and tryptophan contents and sulphur distributions (cystine-cysteine and methionine contents) of plant-leaf protein preparations, III, 218. Protein samples from fresh leaves of plants and sulphur distributions of the samples, III, 218. Identification and measurement of combustible gases in metabolic products of sheep, III, 295. Representativeness of extracted samples and efficiency of protein extraction from fresh leaves; partial analyses of whole proteins of leaves, III, 342.
- Luisada, A., and Sossai, A., Schuntermann's method of calculating pressure in pulmonary artery controlled by direct measurement, III, 746.
- Lukanin, G. I. See Kissin, B. I.
- Lukashevitch, V. O., preparation of mixed azoxy-compounds by the action of nitroso-compounds on β -aryl-hydroxylamines, II, 208.
- See also Eichman, R. K.
- Lukens, F. D. W., pancreatectomy in the goat, III, 64.
- See also Dohan, F. C.
- Lukens, J. A. See Parkhurst, H. J.
- Lukens, M. See Boerner, F.
- Lukes, B. V. See Gilliland, E. R.
- Lukovzev, P., Levina, S., and Frumkin, A., hydrogen overvoltage on nickel, I, 614.
- Lumière, A., and Meyer, P., effect of phenylpropylamines on the frog heart. III, 454. Inhibition of anaphylactic and anaphylactoid shock by atropine, III, 512.
- Meyer, P., and Szczecinski, M., effect of injecting carbon suspensions on leucocyte content of venous blood, III, 647. Effect of intravenous carbon suspensions on partition of leucocytes between cardiac and peripheral blood, III, 1026.

- Lumsden, blood groups in relation to agglutination of human red blood corpuscles by heterologous (rat) sera, III, 551.
- Lund, H., and Trier, E., ascorbic acid, a precursor of vitamin-C. II., III, 496.
- Trier, E., Ottsen, M., and Elmby, A., ascorbic acid, a precursor of vitamin-C. I., III, 496.
- Lund, W. A., Heiman, V., and Wilhelm, L. A., relation between egg-shell thickness and strength, III, 156.
- Lundberg, A., development of glia and connective tissue in optic nerve during foetal life, III, 1044.
- Lundberg, K. See Euler, H. von.
- Lundberg, W. O. See Ahlberg, J. E.
- Lunde, G., inland goitre region without iodine deficiency, III, 992. Form of combination of iodine in iodine-treated hyperthyroid thyroid glands, III, 1048.
- and Kringstad, H., changes in the hair of rats produced by deficiency in factors of the vitamin-B complex. II., III, 400.
- Kringstad, H., and Olsen, A., determination of lactoflavin in natural products, III, 921.
- See also Kringstad, H.
- Lundegårdh, H., biological boundary potentials, III, 515. Electro-chemical theory of salt absorption and respiration [in wheat roots], III, 532.
- Lundell, G. E. F. See Hoffman, J. I.
- Lundgren, H. P., protein stability as revealed by ultracentrifugal analysis, III, 869.
- Pappenheimer, A. M., jun., and Williams, John Warren, mol. wt. of the diphtheria toxin protein, III, 525.
- Lundgren, L., excretion of calcium and magnesium in urine, III, 694.
- Lundquist, F. See Veibel, S.
- Lundsgaard, E., phosphate exchange between blood and tissues in experiments with artificially perfused livers and hind limb preparations, III, 14.
- Nielsen, N. A., and Ørskov, S. L., effect of insulin on isolated mammalian liver, III, 379. Glucose utilisation and lactic acid formation in the isolated hind limb preparation, III, 408.
- Lundsteen, E., effect of citric acid on the colorimetric determination of inorganic phosphate; significance in phosphatase experiments, III, 540.
- and Vermehren, M., serum-phosphomonoesterases showing activity at weakly acid reaction, III, 723.
- Lundstein, E., Meulengracht, E., and Rischel, A., chronic acetanilide poisoning, III, 190.
- Lundy, C. J., Treiger, I., and Davison, R., induced ventricular extrasystoles in the exposed rotated human heart, III, 558.
- Lundy, J. S., anaesthesia in Europe in 1938, III, 314. Closed method of venipuncture, III, 563. Fixation of the skin and jugular vein with a towel clip to facilitate venipuncture, III, 660.
- Osterberg, A. E., and Essex, H. E., meteyaine in oil [for prolonged anaesthesia], III, 933.
- and Rogers, D. A., hand-roller for rapid, intravenous administration of urgently needed blood or solutions, III, 230.
- Lups, S., paradoxical behaviour of blood-sugar level during insulin treatment, III, 910.
- Lupulesco, I. I., and Popesco, I., uleron poisoning, III, 859.
- Luque, O., and Caraffa, C. B., spinal hydatidosis, III, 666.
- Luria, S., lytic unit of bacteriophage, III, 878. Effect of p-aminobenzenesulphonamide on *B. coli*, III, 943.
- Lurie, S. I., local anaesthetic action of substances of the quinoline-4-carboxylic acid series. I., II, 387.
- Lush, D. See Burnet, F. M.
- Lushman, E. A., and Weed, H. P., effect of light-flashes during the course of dark-adaptation, III, 133.
- Lustig, B., and Wachtel, H., growth-controlling hormonal substances of hypophysis, III, 677.
- Lustman, B. See Leberknight, C. E.
- Lutembacher, R., action of toad poison on the heart, III, 18.
- Luten, D. B., jun., preparation of aminonitriles and their quaternary ammonium derivatives, II, 145.
- Luther, W., radiosensitivity and mitosis, III, 319. Action of neutral-red on epidermal cells of amphibian larvae, III, 808.
- Lutkov, A. N., mass production of tetraploid flax plants by colchicine treatment, III, 637.
- Lutschinski, G. P., chlorosulphonate chlorides. IV. Chlorosulphonates and chlorosulphonate chlorides of metals, I, 334. Viscosity of compounds and limiting volume of sulphur, I, 411. Viscosity of ideal mixtures, I, 463. Absorbing aerosols and gases by liquids, I, 562. Limiting volumes of oxygen and hydrogen, I, 604.
- See also Lichatscheva, A. I.
- Lutwak-Mann, C. See Hopkins, (Sir) F. G.
- Lutz, L., soluble enzymes produced by hymenomycete fungi; coupled "antioxygen" reactions, III, 516. Secretion by hymenomycete fungi of enzymes responsible for alcoholic fermentation, III, 627.
- Lutz, R. E., Merritt, D. T., jun., and Conper, M., *cis*- β -p-bromobenzoyl- α -methylacrylic acid and its esters, II, 216.
- and Reveley, W. G., mechanism of reduction of conjugated systems with terminal carbonyl groups; dienols obtained from unsaturated $\alpha\delta$ -diketones, II, 429.
- and Small, L., reduction studies in the morphine series. IX. Hydroxycodine, II, 457.
- and Smith, J. M., jun., $\delta\delta$ -dimethoxy- $\alpha\delta$ -diphenylbutane- $\alpha\gamma$ -dione enol, II, 375.
- See also Burger, A.
- Lutz, W., absorption of orally administered tetraiodophenolphthalein, III, 150. Importance of bile for absorption and excretion of uleron, III, 927. Determination of uleron, III, 927. Mechanism of cholecystography, III, 987.
- and Seyfried, H., action of bile and bile salts on absorption of tetraiodophenolphthalein, III, 485.
- Lutzmann, H. See Helferich, B.
- Lu Valle, J. E. See Stevenson, D. P.
- Lux, H., "acids" and "bases" in liquid melts; determination of oxygen-ion concentration, I, 321. Frequency of the rare earths in the bones of animals, III, 155.
- Luyckx, A., luminescence of mercury vapour along an α -ray pencil, and transfer of nitrogen excitation to mercury, I, 545.
- Luyet, B. J., devitrification temperatures of solutions of a carbohydrate series, I, 605.
- and Hodapp, E. L., revival of frog's spermatozoa vitrified in liquid air, III, 386.
- and Thoennes, G., revival of muscle fibres vitrified in liquid air, III, 368.
- Lvisova, A. See Bauer, E. S.
- Lvov, A., growth factors for micro-organisms, III, 105. Comparative physiology of *Protista eucaryota*; leucophytes and oxytrophs, III, 327.
- and Querido, A., determination of nicotinic acid amide using *Proteus*, III, 402. Specificity of nicotinic acid as a growth factor for *B. proteus*, III, 876.
- Querido, A., Digonnet, L., and Garnier, nicotinamide in the blood of pregnant women, III, 994.
- See also Ballif, L., and Querido, A.
- Lvov, M., synthesising power of *Leishmania*, III, 628.
- Lvov, S., and Limberg, E. L., effect of inorganic phosphates on formation of citric, gluconic, and oxalic acids by *Aspergillus niger*, III, 725.
- and Toupizina, G. M., effect of sodium fluoride on formation of citric and gluconic acids by *Aspergillus niger*, III, 724.
- Lyall, A., and Nicol, B. M., gastric secretions in experimental hypochloremia, III, 758.
- See also Nicol, B. M.
- Lyddane, E. S. See Dardinski, V. J.
- Lyddane, R. H., and Herzfeld, K. F., lattice vibrations in polar crystals, I, 63.
- See also Sklar, A. L.
- Lyden, R., oxidation of chromic oxide by auric oxide hydrate (meta-auric acid), I, 155.
- Lyford, G., apparatus for procuring essential data in differential diagnosis of pelvic pathology in the female, III, 59.
- Lyle, D. J., arrests in embryological development as factors in vision, III, 903.
- Lyman, C. M. See Barron, E. S. G., and Williams, Roger J.
- Lyman, (Miss) E. R., elementary processes in the sensitised fluorescence of OII molecules, I, 597.
- Lyman, R. S., Kwan, S. T., and Chao, W. H., left occipito-parietal brain tumour, III, 468.
- Lynch, C. C. See Hopkins, R. N.
- Lynn, S. C. See Sandin, R. B.
- Lynch, D. F. J. See Nelson, G. H.
- Lynch, E. R. See Kolmer, J. A.
- Lynch, G. W. See Harris, A. W.
- Lynch, J. J., gasoline-torch laboratory burner, I, 434.
- Lynen, F., metabolism of yeast after freezing in liquid air, III, 789.
- Lyon, E., hepatopathy and osteitis deformans in an alcohol addict, III, 931.
- Lyon, R. A., survival of deciduomata during lactation in rat, III, 984.
- and O'Neil, F. C., congenital syphilis. II. Comparison of treatment with acetarsone and other arsenicals, III, 1087.
- and Seymour, M., congenital syphilis. I. Treatment with acetarsone of infants whose mothers were inadequately treated during pregnancy, III, 1087.

- Lyon, W. A. See Klotz, J.
 Lyons, M., Insko, W. M., jun., and Martin, J. Holmes, effect of intraperitoneal injections of manganese, zinc, aluminium, and iron salts on occurrence of slipped tendon in chicks, III, 600.
 Lyons, R. E. See James, F. L.
 Lyons, S. S., vinethene burn, III, 186.
 Lyons, W. R. See Bischoff, H. W., and Stadler, L. B.
 Lysholm, E. See Liljestrand, G.
 Lythgoe, B. See Macrae, T. F.
 Lythgoe, R. J., and Quilliam, J. P., relation of transient orange to visual purple and indicator-yellow, III, 134.
 See also Schneider, E. E.

M.

- Ma, C. M. See Chuang, C. K.
 Maak, H. See Hett, J.
 Maar, O., spectral measurements with 0.2—0.5-mm. waves on high-frequency insulators and oxides, I, 550.
 Maas, J. van der. See Dols, M. J. L.
 Maas, J. A., actions of gum arabic injections, III, 188. Gum arabic as an infusion liquid, III, 651.
 Maas, W. See Ornstein, L. S.
 Maaske, C. A. See Boyd, T. E., and Oester, Y. T.
 Maass, O. See Dacey, J. R., Holder, C. H., McIntosh, R. L., and Pall, D. B.
 Maassen, R., pellagra following gastro-enterostomy, III, 74.
 and Büttner, H. E., dust danger in the fireclay industry, III, 1092.
 McAlister, E. D., chlorophyll-carbon dioxide ratio during photosynthesis, III, 800.
 McAlister, F. F., effect of ether anaesthesia on volume of plasma and extracellular fluid, III, 230.
 McAlpin, K. R. See Turner, K. B.
 McAlpine, D., familial neuromyelitis optica: its occurrence in identical twins, III, 372.
 Macarovici, C. G., separation of iron, aluminium, and chromium from cobalt, nickel, and manganese by means of pyridine, I, 625.
 and Popper, E., analysis of the water and mud from the lake and environs of the "baths of the town of Turda" [Roumania], I, 628.
 See also Spacu, G.
 McArthur, C. S., and Watson, E. M., isolation of α - and β -tocopherols and their derivatives, III, 923.
 McArthur, J. See Davenport, H. A.
 Macary, S. See Mercier, F.
 McBain, E. L., diffusion of long-chain sulphonic acids, I, 369.
 McBain, J. W., opaque ultracentrifuges for direct analysis, I, 46. Soaps and similar long-chain derivatives as simple half-strong electrolytes in dilute solution, I, 417.
 Bacon, R. C., and Bruce, H. D., optical surface thickness of pure water, I, 553.
 and Lewis, A. H., simplest transparent ultracentrifuge, I, 494.
 and Leyda, F. A., measurement of sedimentation velocity in simple air-driven tops as ultracentrifuges, I, 104.
 McDowell, (Miss) J. M., and Worden, (Miss) M. E., sorption of methylene-blue by curd fibres of sodium palmitate, I, 562.
 McBain, J. W., and Ferry, L. H., application of film balance to surface of ordinary solutions, I, 139.
 Vold, R. D., and Jameson, W. T., phase-rule study of the mixed soap system sodium palmitate-sodium laurate-sodium chloride-water at 90°, I, 146.
 and Woo, T. M., solution of insoluble dyes in aqueous detergents, I, 24. Influence of silicates on the effectiveness of dilute aqueous detergents in forming thermodynamically stable colloidal solutions of otherwise insoluble dyes, I, 319.
 Macbeth, A. K., and Winzor, F. L., reactions of $\alpha\beta$ -unsaturated cyclic aldehydes and ketones. IV. *d*-Cryptone and *trans-d*-cryptol, II, 165.
 See also Berry, P. A., Cooke, R. G., and Gillespie, D. T. C.
 MacBride, E. W., further evidence for Lamarckian theory of cause of evolution, III, 889.
 MacBryde, C. M., treatment of parathyroid tetany with dihydrotachysterol, III, 41. Breast growth in women, III, 756.
 McBurney, C. H. See Williams, Roger J.
 McCall, J. O., and Kramow, F., influence of metabolism on teeth, III, 170.
 McCalla, A. G., fractionation of nitrogen in developing wheat kernels, III, 339.
 See also Spencer, E. Y.
 MacCallum, F. O., Findlay, G. M., and Scott, T. McN., [virus of] pseudolymphocytic choriomeningitis, III, 1105.
 See also Findlay, G. M.
 MacCammon, W. O., sulphanimide in the treatment of smallpox, III, 857.
 McCance, R. A., analysis and differentiation of composition of iron, phosphorus, and calcium compounds in respect of nutritional requirements. II. Ionisable and available iron in foods, III, 701. Ionisable and available iron in foods, III, 765.
 and Widdowson, E. M., absorption and excretion of iron following oral and intravenous administration, III, 6. Functional disorganisation of kidney in disease, III, 390. Fate of calcium and magnesium after intravenous administration to normal persons, III, 715.
 See also Haynes, A.
 McCann, W. S., Bright's disease, III, 595.
 McCarroll, H. R., regeneration of sensation in transplanted skin, III, 245.
 McCarter, J. R. See Kanne, E. M.
 McCarthy, C. J. See O'Brien, E. J.
 McCarthy, E. F., and Van Slyke, D. D., diurnal variations of hemoglobin in the blood of normal men, III, 650.
 McCarthy, J. F., Green, L. F., and Green, C. G., substrate specificity and inhibition characteristics of two copper-protein oxidases, III, 720.
 See also Green, L. F.
 McCarthy, J. L. See Peniston, Q. P., and West, E.
 McCarthy, P. L. See Brickman, L.
 McCarty, M. See Hodes, H. L.
 McCaughan, J. M., blood-diastase test in pancreatic disease, III, 1058.
 Macchia, E., indole. IX. Liver-glycogen during experimental indole poisoning. X. Modifications in the Macchia indole test of hepatic function. XI. Test of renal function by administration of indole, III, 299.

- Macchia, E., and Cataldi, G. M., indole. VIII. Indole and blood constituents, III, 65.
 and Colucci, G., indole. VII. Hepatic function tested by the indican-indole index in Parkinson's disease, III, 65.
 Macciotta, E., preparation of dinitro-anilines, II, 255. Nitroamines. VIII. Nitroaminobenzoic acid, II, 423.
 McCleery, D. P. See Oldham, F. K.
 McClellan, W. R. See Connor, R.
 McClelland, E. W. See Bartlett, R. G., and Hart, L. E.
 MacClement, W. D. See Smith, K. M.
 McClenahan, W. S. See Hockett, R. C.
 McClendon, J. F., release of colloid from the thyroid by centrifugal force, III, 257.
 and Foster, W., determination of [thyroid] "hormone iodine" in 5 c.c. blood, III, 256.
 and McLennan, C. E., hormone-iodine in maternal and umbilical cord blood, III, 1048.
 and Rice, C. O., blood hormone-iodine and iodide reserve in relation to basal metabolic rate, III, 975.
 and White, R., [determination of] iodine in samples containing little organic matter other than urea, III, 222.
 See also Bratton, A. C.
 McClung, L. S. See Baker, N. E.
 McClure, F. J., micro-determination of fluorine by thorium nitrate titration, I, 276.
 McClure, F. T. See Sandin, R. B.
 Maccolini, R., effect of lanoline, calcium chloride, and potassium alum on vaccine activity of carbohydrate-lipin antigen, III, 329. Effect of lanoline on toxicity of the complete antigen of Boivin and Mesrobianu, III, 428.
 MacColl, L. A., reflexion of electrons by metals, I, 590.
 MacColl, W. A., clinical experience with sulphapyridine, III, 611.
 McCollum, E. V., diet of the pregnant woman, III, 397.
 See also Ahmad, B., Day, H. G., Mackenzie, C. G., and Prehuda, H. J.
 McConnell, D., [structure of francolite; isomorphism of the apatite group], I, 47. Problem of the carbonate-apatites; a carbonate oxy-apatite (dahlite), I, 47. Isomorphic substitutions in apatite, I, 284. Chemical similarity of idocrase and garnets, I, 286.
 See also Sandell, E. B.
 McConnell, J. S., Forbes, J. C., and Apperly, F. L., chemical studies of a Gaucher spleen, III, 499.
 McConnell, K. P. See Hartman, F. A.
 McCoord, A. B. See Bresse, B. B., jun., and Clausen, S. W.
 McCoord, C. P., and Bradley, W. R., basophilic aggregations in blood of newly born animals and man, III, 646.
 and Witheridge, W. N., measurement of air conditions, III, 316, 620.
 McCorkle, M. R. See Ralston, A. W.
 McCormick, H. See Salceanu, C.
 MacCorquodale, D. W., chemistry of sex hormones, III, 1056.
 Binkley, S. B., McKee, R. W., Thayer, S. A., and Doisy, E. A., inactivation of vitamin-K by light, III, 996.
 Binkley, S. B., Thayer, S. A., and Doisy, E. A., constitution of vitamin-K₁, II, 433.

- MacCorquodale, D. W., McKee, R. W., Binkley, S. B., Cheney, L. C., Holcomb, W. F., Thayer, S. A., and Doisy, E. A., identification of vitamin-K₁ (alfalfa), III, 996.
See also Binkley, S. B., McKee, R. W., Smith, G. V., Thayer, S. A., and Westerfeld, W. W.
- McCoy, E. See Sjolander, N. O.
- McCoy, H. N., salts of europium, I, 575.
- McCrady, M. H., slow lactose fermenters in water analysis, III, 629.
- McCreary, R. L. See Valley, G. E.
- McCreath, D., and Smith, F., derivatives of 3:4-monoacetone β -1:6-anhydrogalactose, II, 202.
- McCrosky, C. R. See Almfelt, C. H.
- McCullagh, D. R., stability of testis hormone, III, 482.
and Cuyler, W. K., response of capon's comb to androsterone, III, 933.
- Jaglenski, T., and Klobucar, F., oxygen-absorbing power in diseases, III, 125.
- and Osborn, W. O., male sex hormones of human urine and blood, III, 53.
- McCullagh, E. P., deoxycorticosterone acetate in Addison's disease, III, 580. Treatment of testicular deficiency with testosterone propionate, III, 755.
- and Johnston, C. R. K., manipulation of glucose tolerance by diet, III, 79.
- Rumsey, J. M., and Cuyler, W. K., excretion of urinary androgens following injection of testosterone propionate, III, 983.
- McCullagh, R. D., and Guillet, R., laboratory methods in endocrinology, III, 575.
- McCulloch, W. P. See Henderson, A.
- McCulloch, W. S. See De Barenne, J. G. D., and Marshall, C.
- McCullough, N. B. See McGinty, D. A.
- McCutcheon, M., Coman, D. R., and Dixon, H. M., negative chemotropism in leucocytes, III, 349.
See also Coman, D. R.
- McDaniel, P. W. See Langer, L. M.
- McDearman, S. See Sprunt, D. H.
- McDermott, W. C. See Price, R. W.
- MacDonald, A. See Barcroft, J.
- Macdonald, A. D., and Wislicki, L., effects of cabbage extracts on carbohydrate metabolism, III, 300.
- MacDonald, A. M., and Robson, J. M., production of vaginal mucification with the synthetic oestrogen, triphenylethylene, III, 383.
- McDonald, C. H., Boyce, R. W., and De Croat, A. F., hyperthyroidism and cardiac glycogen, III, 376.
See also Boyle, R. W.
- Macdonald, C. R., clinical and veterinary uses of wheat-germ oil and vitamin-E preparations. IV. Treatment of habitual and threatened abortion, III, 1074.
- Macdonald, D., disappearance of bromsulphalein dye from the blood; its relation to liver function, III, 271.
- Macdonald, G., anaemia of labourers on Assam tea estates, III, 811.
- Macdonald, G. A., and Merriam, R., andalusite in pegmatite from Fresno County, California, I, 47.
See also Durrell, C.
- McDonald, H. J., and Seltz, H., heat capacities of titanium dioxide from 68° to 298° K.; thermodynamic properties of titanium dioxide, I, 556.
- Macdonald, R. See Watterson, D. J.
- Macdonald, R. F. See Baird, D.
- McDonald, R. H., clinical significance of increased non-protein-nitrogen of blood, III, 1029.
- Macdonald, W. F., argyria, III, 1089.
- McDonough, F. K., homeostasis in the sympathectomized dog, III, 748.
See also Beecher, H. K.
- McDowall, R. J. S. See Halliburton, W. D.
- MacDowell, E. C., Potter, J. S., and Taylor, M. J., influence of transplantation on immunological properties of leukemic cells, III, 1027.
- McDowell, (Miss) J. M. See McBain, J. W.
- McEachern, R. See Pudenz, R. H.
- McEachern, T. H. See Levine, S. Z.
- Macek, J. See Majer, V.
- McEneley, W. J. See Andervont, H. B.
- McElroy, L. W., and Goss, H., four members of the vitamin-B complex synthesized in the rumen of the sheep, III, 993.
- McElvain, S. M. See Tullock, C. W.
- McEntegart, W., binocular stereoscopic vision, III, 1043.
- McEuen, C. S., occurrence of cancer in rats treated with estrone, III, 57. Occurrence of lymphosarcoma in rats, III, 990. Observations on rats treated with oestrin and testosterone, III, 1053.
- Selye, H., and Collip, J. B., pigmented adenoma of intermediate lobe in rat chronically treated with oestrin, III, 980.
- and Waugh, T. R., spontaneous lymphomatosis in a mouse of the dilute brown strain, III, 847.
- McEwen, E. G. See Boylston, G. A.
- McEwen, M. B., and Arnot, F. L., formation of HeH⁺ molecules, I, 550.
See also Arnot, F. L.
- McFadden, T., ionisation of mercury, I, 291.
- McFarlan, R. L., spectroscopic methods of vitamin measurement, III, 919.
- McFarland, R. A., and Evans, J. N., alterations in dark adaptation under reduced oxygen tensions, III, 903.
See also Keys, A.
- McFarland, R. C., and Goldstein, H., biochemistry of dementia praecox, III, 130.
- Macfarlane, M. G., phosphorylation of carbohydrate in living cells, III, 625.
- and Salaman, M. H., enzymic activity of vaccinal elementary bodies, III, 208.
- Macfarlane, R. G., measurement of clot-retraction, III, 742.
See also Elliott, G. A.
- McFarlane, W. D., and Guest, G. H., colorimetric determination of hydroxyproline and its application to gelatin hydrolysates, II, 528.
- and Sutherland, A. J., determination of vitamin-A by spectrophotometry and by photo-electric colorimetry, III, 494.
See also Guest, G. H., and Shaw, J. L. D.
- McFetridge, E. M. See Boyce, F. F.
- McGavack, T. H., acute haemolytic (Lederer's) anaemia, III, 549.
- MacGillavry, C. H., De Wilde, J. H., and Bijvoet, J. M., crystal structure of K₂HgCl₄·H₂O, I, 305.
- Nijveld, H., Dierdorp, S., and Karsten, J., crystal structure of NH₄CdCl₂ and RbCdCl₂, I, 185.
See also Bijvoet, J. M.
- MacGillivray, J. H., spectrophotometric and colorimetric analyses of tomato pulp, III, 803.
- McGinty, D. A., Anderson, L. P., and McCullough, N. B., effect of local application of progesterone on the rabbit uterus, III, 756.
See also White, Julius.
- McGirr, J. L. See Cuthbertson, D. P.
- McGookin, A., Robertson, A., and Tittensor, E., rottlerin. IV. and V. Tetrahydro-*allorottlerin*, II, 559.
and Swift, S. R., orientation problems. II. Nitration of acetolactides, II, 255.
- McGovern, T., Gannon, C. F., and Wright, I. S., vitamin-C deficiency; clinical and therapeutic problems, III, 768.
- and Wright, I., purpura haemorrhagica following use of sedormid, III, 816.
- McGowan, J. C. See Campbell, W. G.
- Macgrath, B. G., and Vollum, R. L., bacteriostatic effects of sulphonamide-P, soluseptasine, and M. & B. 693, III, 81.
- McGrath, J. F. See Rottino, A.
- McGrath, J. W., differences between the M₁ and M₂ absorption edges of gold in the pure metal and in a gold-copper alloy, I, 502.
- McGraw, D. A. See Colwell, R. C.
- McGreal, M. E., Niederl, F., and Niederl, J. B., condensation of ketones with phenols, II, 153.
- MacGregor, D. F., action of procaine and of cocaine on mammalian skeletal muscle, III, 864. Relation of cocaine and of procaine to the sympathetic system, III, 930.
- MacGregor, J. H. See Hopper, I. I.
- MacGregor, J. S. See Blair, D.
- MacGregor, M., evolution of the Criffel-Dalbeattie quartz-diorite: study of granitisation, I, 108.
and Wilson, Gilbert, granitisation and associated processes, I, 542.
- MacGregor, T. N. See Winterton, W. R.
- McGregor-Robertson, J. G., acute gonorrhoea treated with M. & B. 693, III, 305.
- McGuinness, A. C. See Aldrich, C. A.
- McGuire, G. See Siegel, L., and Truhlar, J.
- McGuire, J., Shore, R., Hauenstein, V., and Goldman, F., cardiac output in compensation and decompensation in the same individual, III, 18. Cardiac output in congestive failure, III, 456. Effect of exercise on cardiac output in congestive heart failure, III, 558.
See also Reid, M. R.
- Mach, R. S., and Naville, M., serum non-protein-nitrogen increase of central origin, III, 817.
- Machado, A., conversion of quinine into quinotoxin, II, 457.
- McHargue, J. S., and Offutt, E. B., [determination of] less common elements [in plant material]; modification of the tentative method for determination of iodine, III, 1114.
- McHarness, R. C. See Benning, A. F.
- Machatschki, F. See Hägele, G.
- Machebeuf, M. A., and Mandoul, R., toxicity of extracts of *Ascaris*, III, 935.
- and Tayeau, F., liberation of lipins from lipin-protein complexes of serum by soaps, III, 452. Removal of lipins from serum-globulin without denaturation; application to the study of the rôle of lipins in the fractionation of lobulins into eu- and pseudo-globulin, II, 452. Nature of serum-albumins in lipid nephrosis, III, 553.
- Tayeau, F., and Battut, V., comparison between various methods for separation and determination of globulin fractions in serum; definition of the terms "globulins," "euglobulins," and "pseudoglobulins," III, 553.

- Machella, T. E., and Higgins, G. M., anemia induced in rats by administration of sulphanilamide, III, 610.
- McHenry, E. W., nutrition in Toronto, III, 396. Nutrition in Canada, III, 1064.
- and Gavin, G., B-vitamins and fat metabolism. II. Effect of thiamin on synthesis of body-fat in pigeons, III, 602.
- See also Barrett, H. M., Fidler, E., and Sheppard, Margaret.
- Machle, W. F., normal urinary excretion of fluorine and mottled [dental] enamel, III, 153.
- Scott, E. W., and Treon, J., physiological response to isopropyl ether and to a mixture of isopropyl ether and petrol, III, 617. Normal urinary fluorine excretion and fluorine content of food and water, III, 765.
- Macht, D. I., effect of Roentgen rays on phytopharmacological reaction of blood, III, 193. Phytotoxic reactions of normal and pathological blood-sera, III, 341.
- and Grumbein, M. L., phytotoxic reactions of fresh, frozen, and dried blood, III, 5.
- McHugh, J. L. See Clemens, W. A.
- Macierewicz, Z. See Lampe, W.
- McIlroy, L., obstetric shock, III, 143.
- McIlwain, H., effect of agar on production of staphylococcal α -haemolysin, III, 332. Pantothenic acid and growth of *Streptococcus hemolyticus*, III, 1103.
- Fildes, P., Gladstone, G. P., and Knight, B. C. J. G., glutamine and growth of *Streptococcus hemolyticus*, III, 430.
- and Richardson, G. M., preparation of α -amino acids through α -oximinocesters, II, 101.
- MacInnes, A. S. See West, E.
- MacInnes, D. A., and Brown, A. S., determination of activity coefficients from the potentials of concentration cells with transference, I, 26.
- See also Longworth, L. G., and Shedlovsky, T.
- MacIntosh, F. C., liberation of acetylcholine by perfused superior cervical ganglion, III, 35. Histamine as a normal gastric stimulant, III, 147. Effect of section of preganglionic fibres on content of acetylcholine in sympathetic ganglia, III, 371. Effect of insulin hypoglycaemia and B₁-avitaminosis on acetylcholine content of brain, III, 833.
- See also Brown, G. L., and Kahlson, G.
- McIntosh, J., and Selbie, F. R., filterable tumours induced in fowls by injection of tar, III, 847.
- McIntosh, J. F. See Pudenz, R. H.
- McIntosh, R. L., Dacey, J. R., and Maass, O., pressure, volume, temperature relations of ethylene in the critical region. I and II, I, 515, 603.
- See also Dacey, J. R.
- Macintosh, R. J., and Pratt, C. L. G., the Oxford inflator: a simple resuscitator, III, 240.
- McIntyre, A. R., and Burke, J. C., vitamin-B fractions and insulin tolerance in the albino rat, III, 286.
- and Sievers, R. F., pharmacology of new local anaesthetics, III, 186.
- See also Bisgard, J. D., and Burke, J. C.
- McJunkin, F. A. See Tweedy, W. R.
- Mack, E., *Bacterium herbicola*, III, 328.
- Mack, H. C. See Sharp, E. A., and Siddall, R. S.
- Mack, J. E., and Laporte, O., structure of the arc spectrum of tungsten, WI, I, 290.
- See also Laporte, O.
- McKail, R. A. See Lowdon, A. G. R.
- Mackay, C. A. See Fisher, W. C.
- MacKay, E. M., Carne, H. O., and Wick, A. N., origin of fasting ketosis in the rat following a diet low in choline and protein, III, 1078.
- and Clark, W. G., effect of histamine pretreatment on adrenalectomised rats, III, 43.
- Sherrill, J. W., and Barnes, R. H., antiketogenic activity of succinic acid, III, 709.
- See also Barnes, R. H.
- McKay, F. S. See Dean, H. T.
- McKay, H. A. C., kinetics of exchange reactions, I, 85. Artificial radioactivity and gaps in the periodic table, I, 506.
- Mackay, H. M. M., health of infants fed on roller-process dried milk, with and without supplement of vitamin-A, III, 991.
- Mackay, I., two haematological rarities, III, 547.
- Mackay, I. F. S., indirect determination of gas tensions in mixed venous blood, III, 899.
- Mackay, J. F. See Bowie, F. J. T.
- McKeag, A. H. See Jenkins, H. G.
- McKean, J. G. See Earl, J. C.
- McKee, M. C., and Lobb, D. E., formation of nitrate in detached green leaves of Swiss chard and tomato, III, 212.
- McKee, R. W., Binkley, S. B., MacCorquodale, D. W., Thayer, S. A., and Doisy, E. A., isolation of vitamins-K₁ and -K₂, III, 853.
- See also Binkley, S. B., MacCorquodale, D. W., and Thayer, S. A.
- McKeehan, L. W., relation of ferromagnetic anisotropy to atomic structure, I, 13.
- and Grabbe, E. M., ferromagnetic anisotropy in nickel-iron crystals; evidence for superstructure near Ni₃Fe, I, 247.
- McKeever, C. H. See Fuson, R. C.
- Mackeith, R. C., and Oppenheimer, G., M. & B. 693 in pneumococcal meningitis, III, 774.
- MacKeith, S. A., and Meyer, A., death during insulin treatment of schizophrenia, with pathological report, III, 250.
- McKelvie, A. R. See Kirk, R.
- McKenna, J. F. See Campbell, K. N.
- McKenney, L. F. See Morton, A. A.
- McKenzie, A., night blindness and vitamin-A in African school boys, III, 400. Vitamin-A deficiency among African natives using the visual dysadaptation test, III, 601. Vitamin-B₁ deficiency in hookworm anaemia, III, 766. Bitot's spots, III, 903.
- and Wood, A. D., intramolecular asymmetric induction, II, 555.
- Mackenzie, C. G., and McCollum, E. V., vitamin-E and nutritional muscular dystrophy, III, 1075.
- Mackenzie, J. B., and McCollum, E. V., growth and reproduction on a low-fat diet, III, 706.
- McKenzie, F. F., Miller, J. C., and Bauguess, L. C., reproductive organs and semen of the boar, III, 52.
- Mackenzie, J. B. See Mackenzie, C. G.
- Mackenzie, J. E., and Smith, R. L., crystallography and other physicochemical properties of potassium lead copper hexanitrite, I, 12.
- Mackenzie, R. D. See Findlay, G. M.
- McKeown, A. See Callow, A. E., and Clarkson, L. S.
- McKeown, T. See Clark, W. E. Le G.
- Mackey, A. K. See Pearson, P. B.
- McKhann, C. F., and Kapnick, I., immunity and susceptibility to disease in early infancy, III, 338.
- See also Long, A. P.
- McKibbin, J. M., Oleson, J. J., Elvehjem, C. A., and Hart, E. B., use of liver extract in place of yeast in low-fat diets, III, 1067.
- McKie, D. See Partington, J. R.
- Mackie, T. J. See Anderson, C. G.
- McKinley, L., and Nibarger, A., changes in volume and refractometer readings attending the mixing of cellosolve and water and of carbitol and water at 25°, I, 192.
- Mackinney, G., absorption spectra of leaf extracts, III, 220. Applicability of Kundt's rule to chlorophyll, III, 220.
- McKinney, H. H. See Martin, L. F., and Peterson, P. D.
- Mackintosh, J. See Foot, A. S.
- McKittrick, D. S., Irvine, R. J., and Bergsteinson, I., nitromethane; potential hazards in use, II, 2.
- Macklin, C. C. See Macklin, M. T.
- Macklin, M. T., Lamont, J. A., and Macklin, C. C., erythroblastosis foetalis, III, 1025.
- See also Gowing, J.
- Mackney, A. W., and Reynolds, T. M., comparison of thiobarbituric acid and phloroglucinol as precipitants for furfuraldehyde in determination of pentosans in woods, III, 439.
- McKnight, R. S. See Carl, M.
- Mackowsky, M. T., influence of iron and titanium on the physical characters of garnets of the grossular-andradite series, I, 343.
- MacLachlan, E. A., Carey, B. W., and Butler, A. M., determination of *p*-aminobenzenesulphonamide; micro-method, III, 81.
- MacLachlan, P. L., and Hodge, H. C., effect of cocaine feeding on liver-lipids in mice, III, 615.
- MacLachlan, T., Nessler cylinders of lead glass, I, 583.
- MacLachlan, W. See Bates, G.
- MacLachlan, W. W. G., Johnston, J. M., Bracken, M. M., and Crum, G. E., treatment of pneumococcal pneumonia by hydroxyethylapocupreine, III, 504.
- MacLachlan, A. D., action of ergometrine on the isolated human uterus, III, 89.
- MacLaren, D. B. See Greey, P. H.
- MacLay, W. D., Hann, R. M., and Hudson, C. S., cleavage of the carbon chains of methylaldohexamethylpyranosides by oxidation with periodic acid, II, 408.
- See also Hann, R. M.
- Maclean, A. R. See Horton, B. T.
- MacLean, D. L. See Barrett, H. M.
- McLean, F. C. See Smith, E. E.
- McLean, F. J., and Maegraith, B. G., simple clamp for constriction of arteries in small animals, III, 562.
- See also Brown, G. M.
- Maclean, J. H., Rogers, K. B., and Fleming, Alexander, M. & B. 693 and pneumococci, III, 503.

- Maclean, I. S. See Hume, E. M., and Nunn, L. C. A.
- McLean, J., and Wilson, F. J., reaction between thiosemicarbazones and maleic anhydride, II, 394.
- McLean, M. See Pickett, (Miss) L. W.
- MacLean, M. C., age distribution of the population in relation to mortality, III, 619.
- McLean, W. B., Becker, R. A., Fowler, W. A., and Lauritsen, C. C., short-range α -particles from $^{19}\text{F} + ^1\text{H}$, I, 294.
- McLellan, L. L. See Nomland, R.
- MacLenathen, E. See Wright, I. S.
- McLendon, J. F., iodine and the incidence of goitre, III, 736.
- McLennan, C. E. See McClendon, J. F.
- MacLennan, J. D., serological identification of *Cl. tetani*, III, 1103.
- MacLeod, A. G., action of glucosides on frog's heart, III, 861.
See also Cohn, A. E.
- MacLeod, C. M., treatment of pneumonia with antipneumococcal rabbit serum, III, 775. Metabolism of "sulphapyridine-fast" and parent strains of pneumococcus type I, III, 1082.
and Daddi, G., "sulphapyridine-fast" strain of pneumococcus type I, III, 1082.
- Hoagland, C. L., and Beeson, P. B., use of the skin test with the type-specific polysaccharides in control of serum dosage in pneumococcal pneumonia, III, 204.
- MacLeod, D., hormone therapy in gynaecological conditions, III, 583.
- MacLeod, J., seasonal variations in the normal polynuclear count in man, III, 3.
and Rhoads, C. P., metabolism of leucocytes in Ringer-phosphate and in serum, III, 1026.
- McLeod, J. W. See Abdalla, N. W.
- McLester, J. S., borderline states of nutritive failure, III, 764.
- McMahon, H. O. See Stephenson, C. C.
- MacMahon, J. F., and Walter, W. G., electro-encephalogram in schizophrenia, III, 248.
- McMann, W., and Purcell, C. W., subcutaneous emphysema in newborn infant, III, 824.
- McMaster, P. D., and Parsons, R. J., physiological conditions existing in connective tissue. I. and II., III, 740.
See also Parsons, R. J.
- MacMasters, M. M. See Peters, C. A.
- McMeekin, T. L., serum-albumin. I. Preparation and properties of crystalline horse serum-albumin of constant solubility, III, 1095.
See also Cohn, E. J.
- McMeeking, W. See Duerden, A.
- McMichael, J., hyperpnœa in heart failure, III, 747.
See also Aslett, E. A., and Herrald, F. J. C.
- McMillan, E., radioactive recoils from uranium activated by neutrons, I, 235.
- McMillan, G. W. See Bnswell, A. M., and Wall, F. T.
- M'Millan, Q. C. See Rait, J. R.
- McMillen, J. H., elastic electron scattering in gases, I, 590.
- McMurdie, H. F. See Flint, E. P.
- McMurry, H. L. See Freed, S.
- McMurtrey, J. E., jun., symptoms on field-grown tobacco characteristic of the deficient supply of each of several essential chemical nutrients, III, 881.
- McNab, D. J. N., and Parry, D. E., agranulocytosis from sulphanilamide, III, 1027.
- McNair, J. S., coarctation of the aorta, III, 19.
- Macnair, V., and Roberts, L. J., effect of milk supplement on institutional children. II. Ossification of bones of wrist, III, 1065.
- McNamara, E. W. See Tweedy, W. R.
- McNamara, H. See Gordon, H. H.
- McNamee, R. W. See Hurd, C. D.
- McNatt, E. M., use of Kovar-glass seal in an X-ray cryostat, I, 159. X-Ray dispersion and atomic electron cloud distortion in zinc crystals, I, 599.
See also Jauncey, G. E. M.
- McNaught, J. B., Gordon test for Hodgkin's disease, III, 114.
- Beard, R. R., and DeEds, F., effects of sulphanilamide, phenothiazine, and thionol in experimental trichinosis, III, 1084.
and Pierce, G. N., protective action of alcohol in experimental trichinosis, III, 427.
- McNaught, K. J., determination of cobalt in animal tissues, III, 344.
- MacNeal, W., and Blevins, A., culture slide for dark-field microscopy, III, 226.
- McNeight, S. A. See Reichert, J. S.
- McNeile, L. G., and Page, E. W., personality type of patients with toxæmias of late pregnancy, III, 757.
- McNew, G. L., relation of nitrogen nutrition to virulence in *Phytomonas stewarti*, III, 427.
See also Spencer, E. L.
- MacNider, W. D. B., and Donnelly, G. L., value of omentopexy in establishing an adventitious circulation in the normal kidney, III, 915.
- McNiven, N. L. See Stevens, P. G.
- Macovski, Euf. See Macovski, Eugen.
- Macovski, Eugen., and Macovski, Euf., permeability of living membranes. VII. and VIII. Absorption phenomena and penetration of saponin, III, 784.
See also Candea, C.
- McPhail, F. L., toxæmias of pregnancy, III, 265.
- McPhedran, H., three cases of diabetes insipidus, one associated with toxic goitre, III, 137.
- McPherson, J. D. See Hasselstrom, T.
- MacPhillamy, H. B., and Elderfield, R. C., 2-methyl-l-rhamnose and 2-methyl-d-fucose and their bearing on configuration of digitalose, II, 358.
- MacQuaide, D. H. G. See Hobson, F. G.
- McQuarrie, I. See Brown, W. R., and Ziegler, M. R.
- McQuillan, A. S., parathyroid tumour, III, 256.
- Macrae, T. F., Todd, A. R., Lythgoe, B., Work, C. E., Hind, H. G., and El Sadr, M. M., liver-filtrate factor of vitamin-B₂ complex, III, 1071.
See also Chick, H., Edgar, C. E., and El-Sadr, M. M.
- McReynolds, J. P., and Bailar, J. C., jun., catalytic reaction between sodium nitrite and dichlorodiethylenediamine-cobaltic chloride, I, 33.
See also Smith, H. A.
- McRostie, G. P., Hopkins, J. W., and Grace, N. H., effect of phytohormone dusts on growth and yield of winter wheat varieties, III, 882.
- McShan, W. H., and Meyer, R. K., effect of trypsin and ptyalin on the gonadotropic activity of pituitary extracts, III, 47. Carbohydrate properties of pituitary follicle-stimulating and luteinising preparations, III, 1045. Preparation of follicle-stimulating extracts by use of trypsin, III, 1045.
- McSweeney, C. J. See Roche, W. J.
- McSwiney, B. A. See Carmichael, E. A., Downman, C. B. B., and Little, M. G. A.
- McVay, C. B., and Anson, B. J., fascial continuities in the abdominal, perineal, and femoral regions, III, 441.
See also Anson, B. J.
- McVey, W. C. See Drake, N. L.
- McVicar, G. A. See Armstrong, C. W. J.
- McWhorter, F. P., application of fine-grain processing and condenser illumination enlarging to photomicrography, I, 491. Correlation between self-breaking and blue nuclei among commercial tulip varieties, III, 106.
- Macy, I. G. See Beach, E. F., Hamil, B. M., Hunscher, H. A., Munday, B., and Reynolds, L.
- Maczkowske, E. E., prevention of sticking of burette stopcocks, I, 222.
- Madaeva, O. S. See Uschakov, M. I.
- Madden, J. F., reactions in tattoos, III, 1092.
- Madden, R. J. See Strong, F. M.
- Madding, G. F., and Butt, H. R., hepatitis resulting from inhalation of carbon tetrachloride, III, 415.
- Maddock, A. G., Reid, C., and Emelœus, H. J., iodine and fluorine derivatives of monosilane, I, 622.
- Maddock, C. See Kon, S. K.
- Maddock, S., Hawkins, J. E., jun., and Holmes, E., inadequacy of substances of the "glucose cycle" for maintenance of normal cortical potentials during hypoglycæmia produced by hepatectomy with abdominal evisceration, III, 749.
and Heath, C. W., iron excretion in the dog, III, 555.
- Maddock, W. G. See Collier, F. A.
- Maddox, D. See Ascham, L.
- Madel, G. A. See Lewis, D. R.
- Madhava, K. B. See Aykroyd, W. R.
- Madigan, C. T., Huckitta meteorite, Central Australia, I, 392.
- Madinaveitia, J., diffusing factors. II. and III., III, 556, 961.
See also Barger, G.
- Madis, V., bromometric determination of antipyrine, II, 464.
- Madis, W. R. See Szebellédy, L.
- Madison, R. R., Fish, M., and Frick, O., vitamin-C inhibition of agglutinin production, III, 402. Effects of nicotinic acid on specific antibody production, III, 434.
- Madsen, C. B., simple method for the control of counter-tube aggregates, I, 493.
- Maeda, K., unpaired chenodeoxycholic acid in chicken bile, III, 66.
- Maeda, Michitada, influence of tar products on growth and morphological picture of *in vitro* cultures of iris epithelium, III, 699.
- Maeda, Midori. See Nishikawa, T.
- Maeda, T., and Tateishi, T., clinical observation on hepatic insufficiency, III, 1059.

- Maegraith, *B. G.*, polynuclear count in the Australian aborigine, III, 3.
and Carleton, *H. M.*, aortic arteriosclerosis in rabbits, III, 361.
See also Brown, *G. M.*, Griffiths, *J. H. E.*, and McLean, *F. J.*
- Maercks, *O.*, and Hanle, *W.*, inertia of the Kerr effect, I, 127.
- Marki, *H.* See Knoll, *H.*
- Maerten, *U.*, crossed hypertrophy in syringomyelia, III, 33.
- Maes, *J. P.*, removal of the superior cervical ganglion on lachrymal secretion, III, 61.
See also Simeone, *F. A.*
- Maesser, *S.* See Nielsen, *J. P.*
- Maess, *R.*, function of free radicals in oxidation of *n*-heptane, II, 237.
See also Muffing, *L. von.*
- Maffei, *S.* See Crippa, *G. B.*
- Magalhaes, *H.* See Hafkesbring, *R.*
- Magat, *M.* See De Ficquelmont, *A. M.*
- Halban, *H. von, jun.*, and Moureu, *H.*
- Magath, *T. B.*, coagulation of blood with special reference to prothrombin, III, 9.
- Mager, *A.* See Felix, *K.*
- Maggiarotti, *U.*, treatment of otosclerosis with glycerophosphate, III, 574.
- Maggs, *J.*, thermal decomposition of strontium azide crystals, I, 268.
See also Garner, *W. E.*
- Magidson, *O. J.*, and Bobischev, *M. D.*, quinoline derivatives as sources of medicinal products. VII. Anti-malarial compounds with branched side-chains in position 8, also 6-chloro- and 6-hydroxy-derivatives, and the influence of dimethylamino- and amino-groups in the side-chain, II, 125.
and Golovtshinskaja, *E. S.*, alkylamino-derivatives of 6-nitro- and 6-chloro-quinazolines, II, 285.
- Magitot, *A.*, glaucoma and hypertension, III, 1041. Glaucoma without hypertension, III, 1041.
- Magnan, *C.*, measurement of γ -radiations of high frequency by the materialisation pair method, I, 52. Rupture of nuclei of elements lighter than uranium under neutron bombardment, I, 235. Neutrons emitted during bipartition of uranium under the action of neutrons, I, 351.
See also Bierry, *H.*, and Fabre, *P.*
- Magnani, *A.* See Ferrari, *A.*
- Magne, *H.* See Brebion, *G.*
- Magner, *D.* See Duff, *G. L.*
- Magnes, *J.* See Geiger, *A.*
- Magnoni, *A.* See Simonetta, *B.*
- Magnus, *H. A.*, experimental production of malignant papillomata of the lung in mice with 1:2:5:6-dibenzanthracene, III, 846.
- Magoun, *H. W.*, Fisher, *C.*, and Ranson, *S. W.*, neurohypophysis and water exchange in monkey, III, 974.
See also Clark, *G.*, Fisher, *C.*, and Ranson, *S. W.*
- Magrou, *J.*, molecular concentration [of nutrients] and formation of potato tubers, III, 881.
See also Gosset, *A.*
- Magyar, *I.*, action of vitamin-*B*₁ on carbohydrate metabolism, III, 285.
- Mahadevan, *C.* See Kazim, *S.*
- Mahaux, *J.*, effect of thyrotropic hormone on action of thyroxine, III, 40. Reversal of thyrotropic action by previous injection of thyroxine and thyrotropic hormone, III, 40. Reduction of calorigenic action of thyroxine by large oestradiol injections, III, 476.
- Maher, *F. T.*, and Camp, *W. J. R.*, determination of sulphanilamide in tissue, urine, and blood, III, 927.
- Maher-Loughnan, *G. P.* See Franklin, *K. J.*
- Mahl, *H.*, influence of oxygen on thermionic emission, from investigations with the electron microscope, I, 544.
- Mahler, *A.*, and Greenberg, *D.*, case of hyperchromic macrocytic anemia refractory to liver extract, III, 742.
- Mahler, *F.*, Fresnel diffraction phenomena at ultrasonic waves and their evaluation by Mascart's method, I, 309.
- Mahlo, fermentative gastric processes in the pathogenesis of pernicious anemia, III, 742.
- Mahon, *R.*, action of vegetative nervous system on the uterus, III, 586.
- Mahoney, *J. F.* See Kolmer, *J. A.*, and Morton, *A. A.*
- Mahr, *C.*, selective microchemical test for cadmium, I, 39. Microchemical detection of lead, I, 217. Volumetric determination of thiocarbamide, II, 463.
and Ohle, *H.*, thiocarbamide in quantitative analysis. III. Determination of thallium in presence of other metals, I, 157. Volumetric analysis by means of thiocarbamide. I. Titration of chromates in presence of interfering elements, I, 279.
- Maidanovskaja, *L.*, and Bruns, *B.*, heat of adsorption of hydrogen on platinum, I, 265.
- Maier, *C.* See Löffler, *W.*
- Maier, *C. G.*, separation of gases by diffusion, I, 627.
- Maier, *E.*, simplified method for making photographic records of Petri dish cultures without camera, III, 221.
- Maier, *I.* See Wilson, *G. S.*
- Maier, *J.* See Cleary, *R. V.*
- Maier, *K.*, vitamins as co-enzymes, III, 324.
See also Brockmann, *H.*
- Maier, *K. H.* See Hilpert, *R. S.*
- Maier, *W.*, determination of copper by Schacheldjan's method with the help of Lange's photo-electric colorimeter, I, 488. Necessity of boron for plants, III, 535.
- Maier-Leibnitz, *H.*, the "slow" Wilson chamber, I, 397. Origin of slow mesotrons, I, 400.
- Maier-Weinertgrün, *D.*, experiences with depot insulin, III, 51.
- Maige, *A.*, cellular autotrophy or heterotrophy and evolution of plastids, III, 798.
- Maignon, *F.*, and Thiéry, *J. P.*, effect of powdered pancreas, pancreatic juice, and pepsin on alexin content of serum, III, 894. Alexic power of powdered pancreas mixed with euglobulin, pseudoglobulin, and serum-albumin, III, 894.
- Maillard, *A.*, chemical constants of atoms and molecules, I, 362.
- Maillefer, *J.* See Marchand, *L.*
- Maimin, *R.* See Frankel, *M.*
- Main, *E. R.*, and Shinn, *L. E.*, determination of hydrogen peroxide in bacterial cultures, III, 729.
Shinn, *L. E.*, and Meillon, *R. R.*, anti-catalase activity of sulphanilamide and related compounds. I. Effect of ultraviolet irradiation, III, 305.
See also Locke, *A.*, and Shinn, *L. E.*
- Main, *R. J.*, mineral salts as toxic factors in urinary prolan concentrates, III, 588.
See also Ware, *H. H.*
- Mainz, *M.*, and Meese, *J.*, investigation of retroperistalsis of ureter by urokyomography, III, 275.
- Meese, *J.*, and Wullenweber, *G.*, normal and pathological movement in the urinary passages, III, 151.
- Mainzer, *F.*, aetiology of pellagra, III, 603. Pellagra in identical twins, III, 704. Bilharzial asthma: new type of allergic bronchial asthma, III, 898. Pellagra. II. Hypersensitivity of pellagrins to insulin. III. Blood-sugar curve in pellagrins after oral glucose and after adrenaline injection, III, 994. Persistent pain localised at a distance from the heart (shoulder, epigastric region) in coronary insufficiency, III, 1032.
- and Joel, *W.*, vitamin-*A* lack as a cause of alimentary anemia in young children, III, 285.
- and Krause, *M.*, nicotinic acid in delirium tremens, III, 1071.
- Mair, *B. J.*, and Willingham, *C. B.*, efficiency of a rotary distillation column, I, 391.
- Maisin, *J.*, and Pourbaix, *Y.*, effect of injections of diformaldehyde peroxide on activity of blood-catalase, III, 98.
- Pourbaix, *Y.*, and Camerman, *J.*, effect of ingestion of lactoflavin (*B*₁₂), aneurin (*B*₁), or nicotinic acid on evolution of benzpyrene cancer in mice, III, 846.
- Pourbaix, *Y.*, and Rijckaert, *G.*, effect of testosterone on development of benzpyrene-induced cancer, III, 482.
- Maison, *G. L.*, and Forster, *A. C.*, *pn* changes in ischemic human muscle after voluntary contraction, III, 825.
- Settlage, *P.*, and Grether, *W. F.*, macular representation in the monkey, III, 468.
- Maitland, *H. B.* See Evans, *D. G.*
- Maitra, *A. T.* See Basu, *S.*
- Maitra, *M. K.*, and Moore, *T.*, vitamin-*A* content of "light white" caseinogen, III, 1068.
- Maizels, *G.*, parallel duplication of face in an anencephalic foetus, III, 442.
- Maizels, *M.* See Farmer, *S. N.*
- Maizite, *J.*, extract of crested fern, III, 1111. Fat of crested fern, III, 1112.
- Majer, *O.* See Rudy, *H.*
- Majer, *V.*, can radioactive isotopes of thallium with a long life-period be used as indicators? I, 99. Formation of atomic groupings of radioactive elements, I, 115. New electrochemical curves, I, 267. Preparation and concentration of radioactive gold, I, 331.
and Macek, *J.*, Winkler's semi-microchemical analytical method in technical analysis, I, 535.
- Major, *G.*, [phenylhydrazine] anemia, III, 958.
- Major, *R. H.*, effect of liver extract on polycythemia vera, III, 6. Blood-guanidine in arterial hypertension, III, 365. Treatment of lipid nephrosis, III, 694.
and Leger, *L. H.*, recovery from subacute infective endocarditis following prontosil therapy, III, 303. Marked eosinophilia in Hodgkin's disease, III, 812.
- Majorana, *Q.*, action of intermittent light on thin films of gold, I, 127. Action of light on thin metallic films, I, 127. Thermal theory of metallic photoresistance, I, 181. New magnetic-optical reaction, I, 369.

- Majorov, F. P., Vinogradov, N. V., Golovina, V. P., Narbutovitch, I. O., and Povorinski, T. A., treatment of schizophrenia with tissue hydrolysates of Tushnov, III, 248.
- Majumdar, B. See Chakravarti, D.
- Majumdar, B. N. See De, N. K.
- Majumdar, D. N. See Napier, L. E.
- Majumdar, R. C., and Kothari, D. S., the meson and its transformation into heavy particles, I, 445.
- Majumdar, V. D., and Vajifdar, M. B., coefficients of viscosity of gases, I, 249.
- Makaeva, Z. See Turova-Pollak, M. B.
- Makarov, S. Z., and Blidin, V. P., polymer of the quaternary system $\text{Na}_2\text{CO}_3\text{-Na}_2\text{SO}_4\text{-NaCl-H}_2\text{O}$ and solid solutions of the berkeite type, I, 265.
- and Repa, A. G., solubility isotherms and solid phases of the system $\text{V}_2\text{O}_5\text{-H}_2\text{SO}_4\text{-H}_2\text{O}$, I, 265.
- Makarova, V. V. See Gudlet, M. A.
- Makarova-Semljanskaja, N. N. See Schorigin, P. P.
- Makino, K., constitution of the antineuritic vitamin, II, 40.
- Makishima, S., theoretical studies on electrode potential. III. Absolute value of single electrode potential. IV. Solvent action of liquid ammonia on ionic crystals. V. Standard electrode potentials in liquid ammonia, I, 29.
- Makiyama, M., permeability of hard tooth-substances. I. Migration of amalgam particles into dentin canaliculi, III, 741.
- Makolkín, I. A. See Kapustinski, A. F.
- Makowska, I., crystallisation velocity of lead and its alloy with mercury, I, 185.
- Makowski, J., respiratory mechanism in birds, III, 460.
- Malachowski, R., derivatives of croconic acid, II, 26.
- and Pisarska, H., carbonyl cyanide. II, II, 11.
- Malam, M. See Barker, S. B.
- Malamani, V. See Kienle, F., and Klein, Willibald.
- Malamos, B., clinical examination of pulmonary function by the step method, III, 661.
- Malangeau. See Harlay.
- Malaprade, L., complex periodates. I. Cobaltiperiodates, I, 155.
- Malaschenko, E. N. See Voskresenski, S. P.
- Malaschenko, I. V., apparatus with a valve amplifier for measurement of conductivity, I, 44.
- Malatesta, L., xanthates of metals of group VI., II, 404.
- See also Cambi, L.
- Malcolm, D., and Read, John, menthone series. XV. *l-trans-2-Menthen-3-ol*, II, 380.
- Maleczynski, S., and Lankosz, J., blood-cholesterol after infra-red irradiation during prolonged starvation, III, 419.
- Blood-cholesterol after infra-red irradiation and extirpation of the adrenal capsules, III, 419.
- Castration of dogs and blood-cholesterol after infra-red irradiation of the skin, III, 419.
- See also Jalowy, B.
- Maleci, O. See Peterfi, T.
- Malek, I., different types of agglutination of *Eberthella typhi* by hydrogen ions as a function of the antigenic properties, III, 333.
- Presence of viantigen in strains of *Eberthella typhi*, III, 333.
- Effect of antigen-H of *Eberthella typhi* on flocculation by hydrogen ions, III, 333.
- Effect of viantigen on flocculation of *Eberthella typhi* by hydrogen ions, III, 333.
- Effect of antigen-O on flocculation of *Eberthella typhi* by hydrogen ions, III, 333.
- Antigenic properties of the RO strain and its relationships with the O and H strains of *Eberthella typhi*, III, 333.
- Malendowicz, W. See Urbanski, T.
- Malespine, E., disinfection of gas masks, III, 1094.
- Malikiosis, K. See Tsamboulas, N.
- Maliner, M. M., and Matthews, W. F., functional classification of children with heart disease, III, 557.
- Malinowski, M. S., reaction between the oxides of olefines and sulphur monochloride, II, 531.
- Malishev, V. I., frequency of the hydroxyl group in binary mixtures. II. Combination spectrum of solutions of methyl alcohol in carbon tetrachloride and chloroform, I, 249.
- Malkin, I. M., overvoltage in the course of electrolytic deposition of mercury on tantalum, I, 567.
- Malkin, J. I., and Markow, H., comparative results of skin testing with cooked and uncooked foods, III, 936.
- Malkin, T., and Meara, M. L., X-ray and thermal examination of the glycerides. IV. and VI. Symmetrical mixed triglycerides $\text{CH}(\text{O-COR}')(\text{CH}_2\text{O-COR})_2$, II, 97, 403.
- See also Carter, M. G. R., and Kench, J. E.
- Malkov, A., role of phosphates in oxidation processes. VIII., I, 91.
- Mall, G., *in vitro* serum reaction, III, 38.
- Mallatt, R. C. See Geissman, T. A.
- Mallet, J., identity of hallerite and lithium muscovite, I, 287.
- Mallet, L., telorontgenotherapy, III, 717.
- Mallick, A. A. See Qudrat-i-Khuda, M.
- Mallinckrodt-Haupt, A. S. von, determination of vitamin-B₁, III, 766.
- Mallory, T. B., pathology, III, 915.
- Malloy, H. T. See Evelyn, K. A.
- Malm, L. E. See Taft, R.
- Malmberg, M. See Euler, H. von.
- Malméjac, J., and Donnet, V., reflex renal vasoconstriction and urinary chloride elimination, III, 760.
- Donnet, V., and Jonesco, G., vasomotor reactions of skin of central and reflex origin, III, 966.
- Local vasomotor reactions during reflex hypotension, III, 966.
- and Jonesco, G., cutaneous vascular response to carotid sinus nerve stimulation, III, 123.
- Local vascular reactions to changes in blood pressure, III, 966.
- See also Cornil, L.
- Maléuf, N. S. R., exchanges of water and of electrolytes by a pagure (*P. longicarpus*), III, 68.
- Maloney, A. H., botulism and picrotoxin, III, 1003.
- Malowan, L. S., determination of zinc and copper with morpholine, I, 337.
- Malquori, G., and Penta, F., volcanic rocks resistant to the corrosive action of liquid acids, I, 109.
- Malsch, J., structure, relaxation, and dispersion in liquids, I, 127.
- Malter, L., and Langmuir, D. B., tantalum; resistance, emissivities, and m.p.; rate of evaporation, I, 309.
- Maltzahn, F. von. See Douglas-Sauermann, A.
- Maman, A., octanes, I, 134.
- Mamoli, L., degradation of stigmasterol to *allopregnan-20-one*, II, 378.
- Bacterial oxidation of methylandrostenediol to methyltestosterone, II, 378.
- Biochemical transformation of dehydroandrosterone into testosterone, III, 55.
- Behaviour of oestrogenic hormones under the action of fermenting yeast; biochemical transformation of oestrone esters into α -oestradiol, III, 264.
- Bacterial dehydrogenation of pregnenolone to progesterone, III, 265.
- Biochemistry of sexual hormones, III, 478.
- Enzymic biochemistry of sex hormones, III, 684.
- Koch, Richard, and Teschen, H., biochemical dehydrogenation of sex hormones by means of a pure strain of bacteria, III, 793.
- and Schramm, G., bacterial hydrogenation of testosterone and androstenedione; formation of *isoandrostanediol*, *isoandrosterone*, and *androsterone*, III, 266.
- See also Butenandt, A.
- Mamotenko, M., and Schuchovitzki, A., computation of the energy of repulsion, I, 177.
- Man, E. B. See Landauer, W.
- Manahan, C. P. See Sadusk, J. F.
- Manai, A., and Chessa, F., effect of temperature on changes in hemolysis curve *in vitro*, III, 449.
- Effect of cold on hemolysis curve *in vitro*, III, 449.
- Modification in osmotic pressure of erythrocytes kept for short periods in acid and alkaline media, III, 449.
- Manca, B., parathyroid hormone and physicochemical equilibrium of blood-calcium and -phosphorus. II. Electrophoresis of calcium and phosphorus of serum dialysate of dogs treated with parathyroid hormone, III, 680.
- See also Peretti, G.
- Manceaux, A. See Lebon, J.
- Manchester, T. C., acceleration and retardation of invertase activity, III, 1097.
- Mancini, M. A., pharmacodynamics of mercurial diuretics. I., III, 507.
- Pharmacology of *apoptropine*, III, 1001.
- Donatelli, L., and Ciuffi, G., kymograph for pharmacological purposes, III, 1020.
- and Pecciarini, E., Parri's cobalt reaction for identification of barbiturates in urine and body fluids, III, 735.
- Mancini, R. E. See Varela, M. E.
- Mancuso, B., artificial colouring of flowers, III, 341.
- Mandel, P. See Fontaine, R., Guillemet, B., and Hoerner, G.
- Mandelbaum, H., hemolytic reaction following blood transfusion, III, 649.
- Mandelbaum, J. See Hecht, S.
- Mandelstam, S. L., use of flame in spectrum analysis, I, 487.
- Mandillon, G., vitamin-C and its use, III, 603.
- See also Espil, L., and Gatet, L.

- Mandoul, R., comparative toxicity of extracts of *Ascaris* and *Tænia*, III, 935.
See also Macheboeuf, M. A.
- Mandrino, G. See Rehek, M.
- Manegold, E., and Kalauch, K., capillary systems. XXII. (1) Effectiveness of methods of purification (filtration, dialysis, electrolysis, and their combinations). XXII. (2) Dialysis potential. XXII. (3) Disturbance of neutrality at membranes traversed by a current, I, 143, 198, 257.
and Peters, F., apparatus for differential and integral catalytic hydrogenation, I, 105.
- Manery, J. F., and Hastings, A. B., distribution of electrolytes in mammalian tissues, III, 515.
- Manfredi, F. J. See Rojas, P.
- Manfroi, F. See Indovina, R.
- Manganelli, A. See Capani, L.
- Mangelsdorff, A. F. See Hamblin, D. O.
- Mangenot, G., action of colchicine on vegetable cells, III, 437. Root primordia and colchicine, III, 732.
- Mangeot, A. See Hazard, R.
- Mangini, A., and Colonna, M., aromatic nitro-derivatives. XV. 3:4-Dinitrotoluene: reactivity and nuclear configuration. XVI. 3:4-Dinitrotoluene: reactivity and nuclear configuration, II, 13, 102.
and Frenguelli, B., aromatic nitro-derivatives. XVII. Reactivity of 2-chloro-5-nitropyridine. XVIII. Substituted nitropyridines, II, 280.
- Mangold, G. B., jun. See Roberts, L. D.
- Manil, P., heterogeneity of plant viruses, III, 433. Examination of potato tubers for diagnosis of virus infection, III, 536.
- Manin, Y. See Levaditi, C.
- Manini, A. See Zappi, E. V.
- Manjunath, B. L., and Rao, M. S. S., constituents of *Bragantia wallachii*, Lour., III, 536.
and Seetharamiah, A., syntheses of furanochromones and furanoflavones, II, 176.
- Seetharamiah, A., and Siddappa, S., constitution of karanjin from the roots of *Pongamia glabra*, Vent., II, 122.
See also Jois, H. S.
- Manjunath, L., and Rao, M. S. S., occurrence of behenic acid in oil from seeds of *Pongamia glabra*, Vent., III, 536.
- Mankasch, E. See Pakschver, A.
- Mankodi, C. L., and Khalap, V. S., adsorption of [potassium] permanganate and dyes by precipitates, I, 254.
- Manley, C. H. See Houlbrooke, A.
- Manley, J. H., Goldsmith, H. H., and Schwinger, J., neutron energy levels, I, 53. Resonance absorption of slow neutrons in indium, I, 172. Widths of nuclear energy levels, I, 173.
- Manly, M. L., and Bale, W. F., metabolism of inorganic phosphorus of rat bones and teeth as indicated by the radioactive isotope, III, 856.
and Levy, S. R., adsorption studies on enamel, dentine, and bone, III, 1095.
- Manly, R. S., micro-determination of calcium and phosphate, I, 535. Relation of refractive index to density in dental hard tissues, III, 279.
- Mann, E. See Luckner, H.
- Mann, F. C., mechanism of peptic ulceration, III, 689.
- Herrick, J. F., Essex, H. E., and Beldes, E. J., effect on blood flow of decreasing the lumen of a blood vessel, III, 659.
See also Essex, H. E., Herrick, J. F., Kendall, E. C., and Stasney, J.
- Mann, F. G. See Chatt, J.
- Mann, K. C., Smith, H. G., and Wilhelm, J. O., influence of magnetic fields on persistent currents in a closed superconducting circuit, I, 14.
See also Smith, H. G.
- Mann, P. J. G., Tennenbaum, M., and Quastel, H., acetylcholine metabolism in central nervous system; effects of potassium and other cations on acetylcholine liberation, III, 672. Acetylcholine metabolism in central nervous system, III, 971.
- Mann, T., and Keilin, D., hæmocypreïn and hæmocypreïn, copper-protein compounds of blood and liver, respectively, in mammals, II, 231.
See also Keilin, D.
- Mann, W. B., nuclear transformations produced in zinc by a-particle bombardment, I, 4. Cyclotron technique, I, 390.
- Manneback, C. See Bernard, E., and De Hemptinne, M.
- Mannesier-Mameli, A., action of hydroxylamine on camphor- and dithiocamphorimide, II, 28.
- Mannich, C., and Berger, Gerhard, adrenaline derivatives with nuclear amino-groups, II, 215.
and Salzmann, O., dimethylaminoisoprene, II, 203. Dimethylaminodihydroxypentane and dimethylaminotrihydroxohexane, II, 203.
and Schaller, P., stereoisomeric forms of 2-piperidino- and 2-dimethylaminomethylcyclopentanol, II, 124.
and Schilling, O., quinoline derivatives with a basic side-chain, II, 125.
and Schulte, K., di(hydroxymethyl)dihydro-codeine and -morphine, II, 130.
and Siewert, G., 6-benzoylmorphine, II, 232.
- Manning, P. D. V. See Stokstad, E. L. R.
- Manolescu-Tudor, V. See Ciuca, M.
- Manouvrier, J. See Courtois, J.
- Mansfeld, G., thyroid gland and pernicious anaemia, III, 41. Function of nervous system and oxidations occurring in it, III, 471.
and Hamori, A., central control of respiration, III, 24.
- Mansfield, J. S., Weeks, D. M., Steiner, A., and Victor, J., reduction of experimental renal hypertension by pexis of spleen or omentum to kidney, III, 1032.
- Manske, R. H. F., lobinaline, an alkaloid from *Lobelia cardinalis*, L., II, 190. Alkaloids of fumariaceous plants. XVIII. *Fumaria officinalis*, L. XIX. *Corydalis ophiocarpa*, Hook, f. et Thoms. XX. *Corydalis micrantha* (Engelm.), Gray, and *Corydalis cristallina*, Engelm. XXI. *Corydalis lutea* (L.), DC. XXII. *Corydalis ochroleuca*, Koch., II, 190, 290, 395. Alkaloids of *Senecio* species. III. *Senecio integerrimus*, S. *longilobus*, S. *spartioides*, and *S. ridellii*. IV. *Erechtites hieracifolia* (L.), Raf., II, 232. Chemical analysis as an aid to botanical classification, III, 638.
and Ledingham, A. E., synthesis of α -naphthylacetic acid and homologues, II, 212.
- Manske, R. H. F. See also Marion, L.
- Manški, W. See Lachs, H.
- Manson-Bahr, P., and Ransford, O. N., pigmentations of the skin occurring in patients from the tropics: carotinæmia, hæmochromatosis, and alkaptonuria, III, 297.
- Mante, D., Podeanu, A. P., and Eftimie, O., reflex hypertension, III, 822.
- Manter, T., dynamics of quadrupedal walking, III, 1034.
- Manthey, G., influence of change in intraocular pressure in one eye, on that in the other, III, 1040.
- Mantovani, T. See Blanc, G. A.
- Manuel, S. See Chevallier, A.
- Manunta, C., characteristic differences in the intestinal permeability of leaf-carotenoids in various races of silkworm, III, 63. Chromatographic separation of palmitic and stearic acids from their mixture with oleic acid, II, 493. Extraction and crystallisation of red pigment in the skin of species of *Trombidium*, III, 1061. Crystallisation of pigments from flamingo's fat, III, 1062. Pigment from palm (*Cycas revoluta*) fruit, III, 1112.
- Manusova, F. A., effect of aluminium hydroxide on overvoltage of hydrogen, I, 474.
- Manville, I. A., selenium problem and its relationship to public health, III, 867.
- Reithel, F. J., and Yamada, P. M., sources of uronic acid in the apple, III, 537.
See also Reithel, F. J.
- Manwell, R. D., and Goldstein, F., asexual life cycle of the avian malaria parasite, *Plasmodium circumflexum*, III, 522.
- Manzini, C., physico-histology of serous inflammation and of necrosis due to histamine or tyrosine, III, 614.
and Verardi, G., histophysics of thyroid gland, III, 475.
- Manzioli, G., nasal damage in people exposed to vapours containing chromium, III, 898.
- Manzoni-Ansidei, R. See Bonino, G. B.
- Marafion, G., extracutaneous localisation of myxœdema, III, 41.
- Richet, C., Pergola, A., and Lesueur, G., tetany caused by excess œstrogen, III, 1057.
See also Leroux, R.
- Marazzi, R., and Gaunt, R., non-effect of high yeast diet on survival of adrenalectomised rats, III, 1051.
- Marble, A., Joslin, E. P., Dublin, L. I., and Marks, H. H., diabetes mellitus, III, 855.
and Smith, R. M., iron metabolism in hæmochromatosis, III, 650.
- White, P., Bogan, I. K., and Smith, R. M., enlargement of the liver in diabetic children, III, 273.
See also Marshak, A., and Sebesta, I.
- Marble, B. B. See Brues, A. M.
- Marble, J. P., pitchblende ore from Great Bear Lake, Canada, I, 496.
- Marceau, F., influence of sinus arteriosus on intrinsic activity of artery walls, III, 457. Tonus rigidity of blood-vessel walls, III, 457.
- Marcelet, H., free and combined glycerol in juice of ripe olives, III, 216.
- Marcelin, A., maximum distance of distinct visibility through a turbid medium, I, 257.
- Marcellus, F. S. See Martin, S. J.

- Marchal, E. See Roberg, M.
- Marchal, S., Paturel, L., Guérin, M., and Guérin, P., protein content of blood of chickens inoculated with leukemia or sarcoma, III, 891. Protein content of blood of fowls immunised against chicken leukemia, III, 891.
- Marchand, Brissot, M., and Maillefer, J., tubercle sclerosis of malignant type, III, 830.
- Marchionini, A., vitamin-A excretion in the urine in skin diseases and syphilis, III, 164. Acid coat of the skin and anti-bacterial defence. IV. Pathological gaps of the acid coat, III, 279. and Schmidt, Rudolf, acid coat of the skin and anti-bacterial defence. V. Bacterial content in pathological gaps of acid coat, III, 762.
- Marchlewski, J. See Grodzinski, Z.
- Marchlewski, L., isatin, alloxan, and their derived azines, II, 286.
- See also Bednarczyk, W., and Cholewiński, J.
- Marcou, I., histaminolytic capacity of blood, III, 653. Coronary dilator effect of adrenaline in absence of histamine, III, 657. Production of histamine by the heart depending on the cardiac work, III, 657.
- See also Danielopolu, D.
- Marcus, E. See Rogoff, J. M.
- Marcus, H., Sahlgren, E., and Bjerlov, H., brain tumour with Charcot-Adams-Stokes syndrome and oculo-gyric crises, III, 570.
- Marcussen, E., quantitative isolation and spectrographic determination of vitamin-D from liver oils, III, 853.
- Marcussen, P. V., counting of reticulocytes, III, 115.
- Mardashev, S. R., enzymic synthesis. I. Synthesis of isoamyl butyrate, III, 422. and Kuznetsov, T. J., enzymic synthesis. II. Synthesis of isoamyl acetate, III, 422.
- Marderstein, K., X-ray damage and blood picture, III, 646.
- Marduel, H., effect of polarising currents on heart of the eel, III, 656.
- Marei, F., amorphous state. XV. Mechanism of polymerisation. XVI. Case of polymerisation, I, 203.
- Marck, J., Wellmann, O., and Urbányi, L., effect of mineral composition of diet on that of blood of young pigs, III, 398.
- See also Binet, L.
- Marck, K. See Čupr, V.
- Marenzi, A. D., tolerance of adrenalectomised rats to intraperitoneal injections of potassium, III, 42. Potassium balance in adrenalectomised rats, III, 42. Determination of potassium in faeces, III, 484.
- and Lida, E., comparative study of methods used in haemoglobin determinations, III, 449.
- See also Cicardo, V. H., and Porto, J.
- Maresh, M. M., and Washburn, A. H., size of heart in healthy children, III, 1030.
- Maresquelle, H. J., relationship between formulae proposed for kinetics of enzyme reactions and of photosynthesis, III, 868. Common basis of several formulae proposed for kinetics of enzymic reactions, III, 868.
- Margaria, R., energy metabolism of walking and running at various speeds and slopes, III, 293.
- Margaria, R., and Foà, P., lack of protein utilisation during strenuous muscular work and significance of creatinuria, III, 406.
- and Fornaroli, P., nature of the staircase effect [in muscle], III, 26.
- and Porri, G., energy metabolism of rice-workers, III, 404. Indispensability of sugars in muscular work, III, 408.
- Margaritov, V., surface solvation in disperse systems. V. Influence of surface-active substances on the structure of rubber sols, I, 259.
- and Kovarskaja, B., surface solvation in disperse systems. IV. Desolvation of rubber sols in media of different polarities, I, 24.
- and Serebriankova, L., surface solvation in disperse systems. VI. Effect of surface-active substances on the equilibrium of fractions of sodium divinyl polymeride, I, 259.
- Margenau, H., quadrupole contributions to London's dispersion forces, I, 63. Binding energy of ^4He and nuclear forces, I, 446. Van der Waals forces, I, 511.
- and Carroll, K. G., binding energy of ^6Li , I, 6.
- See also Tyrrell, W. A., jun.
- Margitay-Becht, A., and Gomori, P., renal function in Addison's disease, III, 43.
- Margolis, G., Margolis, L. H., and Smith, S. G., cure of experimental canine blacktongue with optimal and minimal doses of nicotinic acid, III, 402.
- See also Margolis, L. H.
- Margolis, H. H., and Krause, G., post-operative parathyroid tetany, III, 909.
- Margolis, L. H., Margolis, G., and Smyth, S. G., secondary deficiency of vitamin-B₁ and riboflavin in the black-tongue-producing diet, III, 495.
- See also Margolis, G.
- Margot, A. See Jadassohn, W.
- Mariani, J., non-euclidean geometry in microscopic space, I, 401. Duality principle and representation of elementary corpuscles, I, 401. Limits of application of metric geometry to nuclear physics. I, I, 446.
- Marić, L. See Rezek, A.
- Mariens, P. See Iterbeek, A. van.
- Marill, F. G. See Raynaud, R.
- Marin, R. See Hieber, W.
- Marine, D., changes in interstitial cells of the testes in myxoedema, III, 975.
- Marinelli, G., effect of chloroamine on vianitigen of *B. typhosus*, III, 207.
- Marinesco, N., preparation of colloids using ultrasonic waves, I, 196.
- Marini, G. B., action of hydroxymethylamides on ethyl pyromucate, II, 439.
- Marinkovitch, R., chemotherapy of gonorrhoea, III, 503.
- Marino, S., and Crocea, A., blood-nitrogen, -chloride, and -amino-acids and xanthoproteic reaction during hemorrhage from gastro-duodenal ulcer, III, 743.
- Marion, L., occurrence of l-nicotine in *Asclepias syriaca*, L., III, 639.
- and Manske, R. H. F., calycanthine. III. Degradation experiments, II, 190.
- Mariotti, E., composition of muscle-proteins of the trout, and sexual development, III, 145.
- Maritz, A. See Fichter, F.
- Marjanović, V. See Njegovan, V.
- Mark, H., chemistry of highly polymerised compounds, II, 237.
- Mark, R., salt-free diet in medicine, III, 1067.
- Markanjan, E. A. See Kusova, Z. B.
- Markee, J. E. See Hinsey, J. C.
- Markees, S., formation and use of ketones in the organism, III, 709.
- See also Mikulicich, G.
- Markelova, M. N. See Tschukavin, M. K.
- Marker, R. E., sterols. XLVI. Steroid content of cows' pregnancy urine. LVII. Ketonic steroids from cows' pregnancy urine and bulls' urine. LXI. Steroidal content of steers' urine, III, 143, 755, 761.
- and Lawson, E. J., sterols. XLVIII. Isolation of androstereone and pregnan-3(a)-ol from human pregnancy urine. LI. Δ^4 -Pregnen-3-one. LII. Reduction products of progesterone and the pregnanediones. LIV. Pregnan-20-one, allopregnan-20-one, and their reduction products, II, 218, 270; III, 266.
- and Oakwood, T. S., hexamethylethane and tetra-alkylmethanes, II, 1.
- and Flambeck, L., jun., sterols. LXIV. 2:3-Dihydroxyandrostane derivatives, II, 368.
- and Rohrmann, E., sterols. XLVII. Reduction products of oestrone. LIII. Structure of the side-chain of sarsasapogenin. LVI. Sarsasapogenin derivatives; episarsasapogenin. LVIII. Position of the nuclear hydroxyl groups in chlorogenin. LIX. Sarsasapogenin derivatives; deoxysarsasapogenin. LX. Oxidation products of sarsasapogenin; structure of the C₂₂ keto-acid. LXII. Position of the hydroxyl group in tigogenin and sarsasapogenin. LXVI. Reactions of tigogenin. LXVII. Sarsasapogenin derivatives; bromo-compounds. LXVIII. Highly branched aliphatic esters of oestrone and α -estradiol. LXIX. Oxidation products of sarsasapogenin; sarsasapogenoic acid and related substances. LXXI. Urane derivatives. LXXII. Oxidation products of sarsasapogenin; C₂₁-dibasic acid. LXXIII. Reactions of digitogenin and gitogenin. LXXIV. Acetic acid derivatives of oestrone and α -estradiol, II, 62, 276, 277, 322, 323, 371, 421, 437, 510, 548, 552, 553, 558.
- and Wittle, E. L., sterols. I. Isolation of caoutchicol. LXIII. Δ^5 -cholestanic acids from the pregnanediols. LV. Structure of pregnanetriol-B, II, 212, 261, 371.
- Wittle, E. L., and Lawson, E. J., sterols. XLIX. Isolation of pregnanediols from bull's urine, III, 266.
- Wittle, E. L., and Flambeck, L., jun., sterols. LXV. Progesterone from allopregnanedione, II, 379.
- Markham, E. C. See Dobbins, J. T.
- Markham, F. S. See Dettwiler, H. A.
- Markley, M. C., simple laboratory shaking machine, I, 341.
- Markoff, N., hirsutism in a patient with glioma of the left frontal lobe, III, 248. Dehydration with sodium chloride-free milk, III, 312. Erythropoiesis of bone marrow in liver cirrhosis and haemochromatosis, III, 348. Morphology and function of the bone marrow in bone diseases, III, 348. Intravital examination of bone marrow in hyperacid osteopathy, III, 810.

- Markov, B. See Essin, O., Schtscherbakov, A. A., and Schtscherbakov, I. G.
- Markova, G. A., and Tschepelevetzki, M. L., standard determination of phosphorus anhydride by the citrate method, I, 97.
- Markova, G. S., and Schattenstein, A. I., acid catalysis in liquid ammonia. III. Catalysis of the reaction of ammonolysis of santoin by acid amides, phenols, and other weak acids. IV. Kinetics of the ammonolysis of pilocarpine in liquid ammonia in the presence of ammonium salts, I, 618.
- Markova, L. G., and Nesmejanov, A. N., preparation of diazo-compounds through the agency of organo-metallic derivatives, II, 543.
- Markovitsch, A. V., and Chaustova, I. M., fractionation of [serum]-proteins by electrodialysis. I. Effect of variation in p_H during electrodialysis on fractionation of proteins and of tetanus antitoxic serum. II. Influence of concentration of proteins on fractionation of serum-globulins, III, 718.
- Markov, H. See Dundy, H. D., and Malkin, J. I.
- Markowitz, B., the goitre cycle and its anatomical findings (report of 1028 sectioned goitres), III, 376.
- Markowitz, I. See Chesley, L. C.
- Markowitz, J. See Young, F. G.
- Markowska, (Mme.) D., rate of formation of α -naphthylamine hydrochloride, I, 477.
- and Valensi, G., rate of formation of ammonium benzoate, I, 477.
- Marks, E. M., and Lipkin, D., reaction of aliphatic ethers with Denigès' reagent, II, 137.
- Marks, G. W., relationship between viscosity of a liquid and vapour concentration, I, 363.
- Marks, H. H. See Marble, A.
- Marks, H. P. See Bliss, C. I.
- Markstein, G., and Nowotny, H., crystal structure of the bromotannates A_2SnBr_6 ($A = Cs, Rb, NH_4, K$), I, 305.
- Markstrahler, H. See Hirt, A.
- Markus, G. See Hüttig, G. F.
- Markuze, Z., vitamins of elephant's milk, III, 399.
- Markwalder, H. See Vannotti, A.
- Markwell, W. A. N., turmeric test-papers containing boron, I, 337.
- Markwood, L. N., funnel-heating device, I, 494.
- Marmont, G. See Harreveld, A. van, and Wiersma, C. A. G.
- Marmoy, F. B., determination of molybdenum in plant materials, III, 949.
- Maron, S. H., and LaMer, V. K., kinetics of neutralisation of pseudo-acids in water and deuterium oxide, I, 31.
- Kinetics of isomerisation of *aci*- to nitro-forms of nitroethane in water and deuterium oxide, I, 269.
- Calculation of base rate constants from acid rate constants, I, 526.
- and Shedlovsky, T., determination of the ionisation constant of *aci*-nitroethane, I, 263.
- Maroney, J. W. See Johnston, J. A.
- Marotta, D., fish in human diets, III, 282.
- Marples, E. See Gordon, H. H., and Levine, S. Z.
- Marquardt, F., uleron excretion in the faeces, III, 83.
- Marquardt, P., adrenaline inactivation by succinic acid, III, 44.
- Products of adrenaline breakdown, III, 581.
- Decomposition of adrenaline and related substances by succinic acid, III, 581.
- Formation of acetaldehyde from succinic acid by quinone catalysis as model reaction, III, 939.
- Marques, P. See Cahuzac, M.
- Marrack, J., protein molecule, III, 785.
- and Duff, D. A., immunological behaviour of fractions of serum-globulin, III, 11.
- and Hollering, H. F., effect of increased salt concentration on the amount of precipitate formed by antisera with specific precipitants, III, 332.
- Excretion of injected aneurin (vitamin- B_{12}), III, 401.
- See also Danielli, J. F.
- Marrazzi, A. S., electrical studies on pharmacology of autonomic synapses. I. Action of parasympathomimetic drugs on sympathetic ganglia. II. Action of a sympathomimetic drug (epinephrine) on sympathetic ganglia, III, 308, 666.
- Marre, P., electrocardiogram in pericarditis, III, 895.
- Marri, R., respiratory and circulatory changes due to intravenous injection of novocaine together with adrenaline, III, 478.
- Effect of β -phenylisopropylamine on organs and nervous system, III, 508.
- Knafli-Lenz guinea-pig method for the assay of digitalis preparations, III, 712.
- African arrow poison, III, 712.
- Toxicity and pharmacodynamic action of apiole, III, 1004.
- and Franceschini, G., pharmacology of β -phenylisopropylamine (benzedrine), and Martinetti, R., action of veronal on adrenaline hypertension, III, 581.
- See also Martinetti, R., and Simonelli, M.
- Marrian, G. F., intermediary metabolism of the steroid hormones, III, 266.
- See also Anderson, (Miss) Edith L., and Schachter, B.
- Marriott, G. J., and Robinson, (Sir) R., aryl-aminophthalic acid derivatives, II, 114.
- Marrus, J. See Abrahamson, D. I.
- Marschall, C., homonuclear 2-hydroxy-1-methylanthraquinones, II, 271.
- Action of sulphur on analogues of anthracene, II, 363.
- Linear hexacene series, II, 380.
- Marschik, H., general anaesthesia in ear, nose, and throat surgery, III, 315.
- Marsden, E. See Hodgson, H. H.
- Marsden, R. W. See Tyler, S. A.
- Marsh, A. E. L. See Goodeve, C. F.
- Marsh, F., experiments in heatstroke in Iran, III, 294.
- See also Wortis, S. B.
- Marsh, J. K., dimethylphosphates of the rare-earth metals, I, 332.
- Marshak, A., stage of mitosis [in onion seedlings] at which chromosomes are rendered less sensitive to X-rays by ammonia, III, 213.
- Fernald, A. T., and Marble, A., effect of fasting on blood-sugar of hereditary dwarf mice [source of diabetogenic pituitary hormone], III, 676.
- Marshak, R. E. See Gronblom, B. O.
- Marshall, A. L. See Verhoeve, F. H.
- Marshall, C., McCulloch, W. S., and Nims, L. F., p_H of cerebral cortex and arterial blood under insulin, III, 909.
- Marshall, C., and Meader, R. G., electrical potentials of living organisms, III.
- Effects of elevated body temperatures in normal anaesthetised mice, III, 277.
- and Nims, L. F., blood- p_H *in vivo*, II.
- Effect of acids, salts, glucose, and adrenaline, III, 118.
- Marshall, C. S. See De Barenne, J. G. D.
- Marshall, E. A., infectious mononucleosis, III, 647.
- Marshall, E. K., jun., Bratton, A. C., and Litchfield, J. T., toxicity and absorption of 2-sulphanilamidopyridine and its soluble sodium salt, III, 305.
- and Cutting, W. C., sulphanilamide; absorption and excretion in the mouse and rat, III, 303.
- Cutting, W. C., and Cutting, W. L., sulphanilamide; absorption and secretion of derivatives, III, 303.
- and Long, P. H., intravenous use of sodium sulphapyridine, III, 858.
- See also Bratton, A. C.
- Marshall, G. S., physical fitness in R.A.F. flying, III, 619.
- Marshall, J. See Du Bridge, L. A.
- Marshall, J. K., disturbances of glucose tolerance and of the acid-base equilibrium in manic-depressive insanity, III, 671.
- Marshall, J. L., phase study of the system citric acid-water, I, 146.
- Marshall, W., therapy of acne vulgaris with modified liver extract, II, 1060.
- and Tarwater, J. S., use of histamine phosphate and peptone solution in the treatment of neuroses and psychoses, III, 35.
- Marshall, W. W. See Pierce, W. C.
- Marsland, D. A., mechanism of protoplasmic streaming; effects of high hydrostatic pressure on cyclosis in *Elodea canadensis*, III, 532.
- Hydrostatic pressure effects on dividing egg cells, III, 740.
- Marsman, W. S., the freemartin compared with the intersex and gelding, III, 60.
- Marsten, H. R., determination of sulphur content of fodder and excreta, III, 344.
- Martello, G. See Civin, H.
- Martensson, J., citric acid metabolism, III, 174.
- Marth, P. C. See Stuart, N. W.
- Martin. See Halphen.
- Martin, A. E. See Fox, J.
- Martin, A. J. P. See Chick, H., and Moore, T.
- Martin, A. R., and Hermann, R. N., action of copper salts on emulsions stabilised by sodium oleate, I, 610.
- Martin, A. W. See Field, J., jun.
- Martin, C. J. See Chick, H.
- Martin, C. P., and Falkiner, N. McI., the Falkiner ovum, III, 442.
- and O'Brien, H. D., coracoid process in primates, III, 1023.
- Martin, D. C., absorption spectrum of cobaltous chloride in deuterium oxide, I, 6.
- and Butler, J. A. V., dissociation constants of nitrophenols in deuterium oxide, I, 565.
- Martin, F. S., factors affecting Raman frequencies of carbon-mercury bond, I, 241.
- Martin, G. See Chodat, F.
- Martin, Gordon. See Hammar, G. W.
- Martin, G. J., fat-free diets, III, 701.
- Martin, J. See Scheibe, G.

- Martin, J. (Gand), production of alkaline milk and increase of the iodine value of the milk fat by 2:4-dinitrophenol, III.
- Martin, János. See Keszytüs, L., and Went, S.
- Martin, John. See Barach, A. L.
- Martin, J. F., and Noel, R., chondriome of chordomas, III, 957.
See also Piéry, M.
- Martin, J. Holmes. See Buckner, G. D., and Lyons, M.
- Martin, John H., Couch, J. F., and Briese, R. R., hydrocyanic acid content of different parts of the sorghum plant, III, 438.
See also Couch, J. F.
- Martin, J. W. See Hayman, W.
- Martin, L., gastric secretion, III, 147.
- Martin, L. A., adsorption of virus of infectious anaemia of Equidae on aluminium hydroxide, III, 728.
- Martin, L. C., electron microscope, I, 160. Experimental rulings, I, 221.
- Martin, L. F., Balls, A. K., and McKinney, H. H., protein changes in mosaic-disensed tobacco, III, 1111.
and McKinney, H. H., tobacco-mosaic virus concentrated in the cytoplasm, III, 336.
- Martin, L. H., and Townsend, A. A., β -ray spectrum of radium-E, I, 293.
- Martin, P., action of calcium in athletic training, III, 419. Comparative action of various depot insulins, III, 682.
- Martin, P. C. See Gordy, W.
- Martin, P. E., Cruaud, and Watremez, effect of ether extracts of pancreas on hypo- and hyper-glycaemia in the dog, III, 1058.
- Frieh, P., Lecuire, Cruaud, and Watremez, effect of double splanchnic nerve section on hypoglycaemia and hyperglycaemia in dog, III, 1029.
- Martin, R. See Cook, James W.
- Martin, R. W., determination of fructose and glucose in blood and urine, III, 885.
- Martin, S. J., and Cominole, B., effect on the electrocardiogram of coumagine, a new alkaloid with digitalis-like action, III, 1003.
and Gorham, L. W., tension factor in cardiac pain, III, 236.
- Marcellus, F. S., and Sykowski, P., plethysmographic [limb volume] studies with special reference to waves of respiration, III, 123.
See also Clark, B. B., Gorham, L. W., and Himwich, H. E.
- Martin, S. T., and Headrick, L. B., light output and secondary emission characteristics of luminescent materials, I, 597.
- Martin, V. D., characterisation of products of enzymic degradation of starch, III, 625.
- Martin, W. F. See Boldyreff, W. N.
- Martin, W. Howard. See Bernstein, H. J.
- Martinetti, R., vasomotor effects of caffeine, III, 458. Inhibition by purines of pressor and respiratory effects of adrenaline, III, 478.
and Friscelli, M., graphical recording of intra-arterial pressure in man, III, 457.
and Marri, R., changes in adrenaline hypertension due to veronal, III, 478.
See also Marri, R.
- Martinez, C. A. See De Espanes, E. M.
- Martinez Esteve, P., effect of ovarian hormones and gonadotropic substances in urine on genital tract of *Didelphys azarae*, III, 584. Effect of ovarian hormones and urinary prolactin on the opossum, III, 584.
- Martini, A., 2:4-dinitro-a-naphthol (Martius-yellow) as a microchemical reagent for thallous and cobaltous ions, I, 218. Microchemistry of yohimbine, II, 352.
and Berisso, B., microchemical detection of hydrocyanic acid in forensic chemical investigations, III, 639.
and Graf, J. C. B., microchemical distinctive reactions for cocaine, novocaine, and stovaine, II, 352.
- Martini, E., effect of previous activity on muscular contraction, III, 747.
- Torda, C., and Zironi, A., effect of tetanus toxin on choline-esterase activity of muscles of rats, III, 826.
See also Torda, C.
- Martini, M. See Balansard, J.
- Martini, M. T., *in-vitro* cultures [of heart] in presence of metallic lead, III, 819.
- Martini, P., homœopathic drug tests in healthy subjects, III, 716.
- Bruckmer, L., Dominicus, K., Schulte, A., and Stegemann, A., homœopathic drugs. III. Sulphur, III, 932.
- Martini, V., respiratory exchange after blood transfusion, III, 825.
and Bussa, D., electrocardiographic changes in the duck during inhibition of respiration by immersion, III, 122.
and Cera, B., liberation of acetylcholine-like substance from dog's vagus on excitation of the vagal centres, and from duck's vagus during inhibition of respiration, III, 969.
and Morando, G. C., behaviour of sulphonated fats administered to depauperated and normal animals, III, 79.
- Morando, G. C., and Minuto, N., absorption from stomach, III, 985.
See also Lombroso, U.
- Martino, G., physiological significance of glucagon, III, 49. Appetite and eating, III, 483. Electrical stimulation of cortical centres of the dog, III, 970.
and Alibrandi, A., conditioned reflexes, III, 33.
- Martino, L., innervation of costal pleura, III, 740.
- Martins, T., contractility and reactions of prostate from normal and castrated rats, III, 51.
and Figueiredo, A., treatment of traumatic increase of intracranial pressure with hypertonic sodium chloride, III, 903.
and Valle, J. R., contractility and survival of isolated human epididymis, III, 482. Effect of spermine and yohimbine on isolated accessory male glands, III, 482. Pharmacology of vas deferens in *Macacus rhesus*, III, 482. Effect of sex hormones on contractility of vas deferens, III, 483. Endocrine control of motility of male accessory genital organs, III, 983.
- Valle, J. R., and Porto, A., contractility and survival of isolated human vas deferens, III, 482. Pharmacology of isolated accessory male organs from normal, castrated, and sex hormone-treated rats, III, 482. Pharmacology of isolated seminal vesicles of *Macacus rhesus*, III, 483.
- Martius, C., intermediary metabolism of citric acid. II., III, 301.
See also Arndt, F., and Knoop, F.
- Marton, L., sensitivity of photographic emulsions for 50—100-ke.v. electrons, I, 573.
- Martret, G., variations of molecular concentration of urine of fresh-water stenohaline teleosts as a function of salinity of the surrounding medium, III, 694.
- Martschuk, P. D., changes in reactivity of the organism after blood transfusion, III, 353.
and Filipova, N. E., treatment of scarlet fever with anti-reticular cytotoxic serum, III, 180.
and Vaisberg, L. M., skin tests, and their connexion with serological phenomena, III, 512.
- Martynoff, M. See Ramart-Lucas, (Mme.) P.
- Martzy, S. See Dubrausky, V.
- Maruaschvili, L. V. See Butkevitch, V. S.
- Marue, M., theory of X-ray interference, I, 243.
- Marusinska, (Mlle.) M. See Dziewonski, K.
- Maruta, K. See Inawasiro, K.
- Maruyama, H., glycolysis and glycogenolysis in brain and blood of normal and psychotic persons, III, 35. Catalase and nadioxidase in the brain, and oxidase reaction in the ganglion cells, of psychotic patients, III, 573.
- Maruyama, S. See Ogata, T.
- Marvel, C. S., Ginsberg, E., and Mueller, M. B., effect of substitution on dissociation of hexa-arylethanes. VI. Hexa-*m*-diphenylmethane, II, 103.
and Glavis, F. J., vinyl halide polysulphones; peracetic acid as a catalyst for the reaction between sulphur dioxide and olefines, II, 3.
- Harmon, J., and Riddle, E. H., condensation of acetaldehyde and vinyl acetate, II, 406.
- and Levesque, C. L., structure of vinyl polymerides. III. Polymeride from α -angelicalactone, II, 404.
- Mozingo, R., and Kirkpatrick, E. C., cyclisation of diclenines. VII. Dehydrogenation of *trans*-dodecahydrophenanthrene; *trans*-1-keto-3:4-di-alkyloctahydronaphthalenes, II, 499.
- Mueller, M. B., and Ginsberg, E., effect of substitution on dissociation of hexa-arylethanes. VII. *m*- and *p*-Phenyl groups, II, 498.
- Mueller, M. B., Himel, C. M., and Kaplan, J. F., effect of substitution on dissociation of hexa-arylethanes. IX. Disproportionation of hexa-*p*-alkylphenylethanes; effect of *o*-, *m*-, and *p*-alkyl groups on the dissociation of hexa-arylethanes, II, 538.
- and Pacevitz, H. A., dimerisation of 3-phenylindene, II, 14.
- and Peppel, W. J., rearrangements of tetra-aryldiallenes. XII. Synthesis of 2:8-diphenylchrysene, II, 254.
- Rieger, W. H., and Mueller, M. B., effect of substitution on dissociation of hexa-arylethanes. VIII. Disproportionation of tri-*p*-tolylmethyl, II, 538.
- and Sharkey, W. H., structural identity of polysulphones prepared by peroxide catalysis and under the influence of ultra-violet light, II, 403.
- and Stoddard, M. P., synthesis of *dl*-glutamic acid, II, 10.
See also Copley, M. J.

- Marvin, G. G., continuous supply of hot distilled water, I, 494.
- Marx, J., action of sodium fluoride on experimental osteodystrophy and inactivation atrophy, III, 90.
- Marx, L., relative duration of electric systole following a ventricular ectopic beat, III, 455.
- Marx, Lotte. See Zondek, B.
- Marx, W. See Friedman, B.
- Marxer, A. See Ruzicka, L.
- Marzullo, E. R., and Franco, S., myxœdema heart, III, 909.
- Mas y Magro, P., quantitative changes in cytoplasm of lymphocyte in relation to functional activity, III, 548.
- Masamune, H. See Umezawa, S.
- Masárek, A. See Bureš, E.
- Masayama, T., Iki, H., Yokoyama, Tuneko, and Hashimoto, M., biochemical study of the course of induction of liver cancer by feeding with dimethylaminoazobenzene, III, 70.
- and Yokoyama, Tuneko, biochemical study of tumour tissue of liver, III, 990.
- Masch, L. W. See Butenandt, A.
- Mascherpa, P., pharmacological observations on Mount Etna, III, 66. Powder therapy, III, 179. Behaviour of intravenously injected, finely divided, metallic powder in the organism, III, 189. Interpretation of the localisation of a metal, administered in combination with the proteins of an organ, in the same organ, III, 394. Organotropism of metals, III, 1004.
- Maschmann, E., activation of peptidases of anaerobic bacteria, III, 198. Bacterial proteases. XI. New proteinase and activatable peptidases from *B. sporogenes*, III, 518. Dipeptidases of anaerobic bacteria, III, 793.
- Masché, M., and Paris, René, do bark (*Mansonina altissima*, A. Chev.) and its digitalis-like properties, III, 1112.
- Masek, J., milk of the wild horse, III, 69.
- Mashimo, T., use of infra-red rays [to obtain volume-pulse curves], III, 562.
- Masima, M., Kuroda, M., Sakui, S., and Watanabe, Hisasi, radiograph of a crystal having close-packed hexagonal lattice, I, 243.
- Masina, N. P., condensing action of nickel- and cobalt-thorium catalysts with aliphatic alcohols, II, 239.
- Masing, G., alloys as chemical systems; their technical applications, I, 193.
- Maslennikova, G. S. See Ostroumov, E. A.
- Masłowski, E. See Dorabalska, A.
- Mason, C. M. See Buehler, T. F.
- Mason, C. W., and Pellissier, G. E., supposed high-temperature polymorphism of tin, I, 360.
- Mason, E. C., and Hitchcock, P., reversal of kidney volume response accompanying abolition of central nervous system, III, 560.
- Mason, E. M. See Griffith, H. D.
- Mason, H. C., failure of vitamin-K excess to heal encephalomalacia of chicks, III, 1075.
- Mason, H. L., chemistry of adrenal cortical hormone, III, 1051.
- and Hoehn, W. M., relatively inert oxygen atom of digoxigenin, sarmen-togenin, and steroid compounds of the adrenal cortex, II, 27. Relation between methyl tetrahydroxycholesterol and the methyl dihydroxytetrahydroxycholesterol derived from digoxigenin; methyl 12-epitetrahydroxycholesterol, II, 371.
- Mason, H. L. See also Ingle, D. J.
- Mason, H. S. See Milas, N. A.
- Mason, J. P., and Gasch, D. J., $\beta\beta'\beta''$ -trichlorotriethylamine, II, 10.
- Mason, K. E., physiological action of vitamin-E and consequences of -E deficiency. II. Vitamin-E and reproductive functions, III, 1074.
- Mason, L. S., and Paxton, H., volume changes of the methyl alcohol-toluene system, I, 136.
- Mason, M. F., manometric estimation of oxygen in small samples of blood, III, 241.
- See also Barcroft, J.
- Mason, R. C., reflexion coefficient of mercury, I, 15.
- Mason, R. W. See Beaumont, G. E.
- Mason, T. G., and Phillis, E., extraction of sap from the vacuole of the leaf of the cotton plant: the osmotic theory of water absorption by the cell, III, 1016.
- See also Phillis, E.
- Mason, W. P., dynamic measurement of the elastic, electric, and piezoelectric constants of Rochelle salt, I, 307.
- See also Holden, A. N.
- Mass, J. A., visco-elastic behaviour of caoutchouc and smooth muscle, controlled by metabolism of the foot of the snail, III, 27.
- Massara, (Signa.) G. See Cusmano, S.
- Massart, L., effects of excess of oxygen on activity of yeast, III, 200. Significance and properties of succinic dehydrogenase, III, 623.
- and Dufait, R., activation and inhibition of choline-esterase, III, 940. Enzymic hydrolysis of acetylcholin, III, 1008.
- Massel, H. M., value of various xanthine derivatives in angina pectoris, III, 361.
- Masselin, J. N., histology of pituitary of toads kept in light and darkness, III, 839. Influence of light and darkness on melanophore-dilating action of hypophysis, III, 907.
- Massengale, O. N. See Bills, C. E.
- Masserman, J. H., effect of strychnine sulphate on emotional mimetic functions of the hypothalamus of the cat, III, 88.
- and Haertig, E. W., action of metrazol on hypothalamus of cat, III, 671.
- Massey, H. S. W., and Buckingham, R. A., long-range forces between hydrogen molecules, I, 128. Low-temperature properties of gaseous helium, I, 135, 191.
- and Corben, H. C., emission and absorption of heavy electrons, I, 174. Elastic collisions of mesons with electrons and protons, I, 506.
- See also Bates, D. R.
- Massie, E., Ethridge, C. B., and O'Hare, J. P., thiocyanate therapy in vascular hypertension, III, 457.
- Masson, G., glucosides of *Taxus brevifolia*, III, 1112.
- and Selye, H., variations in inorganic phosphorus content during adaptation of organism to [harmful] agents, III, 893.
- See also Selye, H.
- Mast, S. O., and Fowler, C., effect of sodium, potassium, and calcium ions on changes in volume of *Amoeba proteus*, III, 725.
- Masten, M. G. See Bleckwenn, W. J.
- Master, A. M., Gubner, R., Dack, S., and Jaffe, H. L., fluoroscopy of ventricular contraction in cardiac infarction, III, 1031.
- Master, W., chemical heater, I, 579.
- Masterman, A. T., colour tests for chlorine, ozone, and hypochlorites with methane base, I, 486.
- Masterman, S. See Hughes, E. D.
- Masters, J. E. See Buehler, C. A.
- Masters, M., determination of sulphur in biological material, III, 954.
- Masters, W. E. See Smith, K. D.
- Masuda, F. See Kitamura, R.
- Masuda, M., Budde, R. N., and Dille, J. M., acquired tolerance to short-acting barbiturates, III, 86.
- Masuda, Y. See Takahashi, E.
- Masuelli, L. See Costa, A.
- Masugi, M., and Minami, G., case of measles with giant cells, containing inclusions, in the mucous membranes of mouth, pharynx, and bronchi, III, 113.
- Masunaga, E. See Badger, L. F.
- Matas, R., and Heninger, B. R., reversible cardiac enlargement in cavernous haemangioma, III, 561.
- Matei, I., and Bogdan, E., reduction and autoxidation products of 7:7-di(hydroxy-aryl)acenaphthenones, II, 20. Condensation of acenaphthenequinone with xylenols and thymol, II, 25.
- Matei, V. See Gheorghiu, C. V.
- Materova, E. A., adsorption of barium, sodium, and lithium ions by glauconite and its dependence on p_H of the equilibrium solution and on the ionic concentration, I, 608.
- Mather, K. See Sax, K.
- Mather, K. F., earth structure and earth origin, I, 346.
- Matheron, R. See Chevallier, A.
- Matheson, M. S., and Zabor, J. W., fluorescence of carbonyl compounds in the gas phase, I, 448.
- Mathewson, W. F. See Tanner, H. G.
- Mathiesen, M., 2:6-dichlorophenol-indophenol-reducing factor in milk compared with biological determination of vitamin-C, III, 1073.
- Mathieu, C. See Kayser, F.
- Mathieu, J. P., Werner complexes; cobalt-ammines from optically active α -amino acids, II, 251. Werner complexes; optical activity and configuration of platonic triethylenediamine ions, I, 454.
- and Ronayette, M., optical properties and structure of cyanocamphor, I, 402.
- Mathur, P. B. See Singh, B. N.
- Matossi, F., effect of temperature and coupling on intensity of infra-red harmonics, I, 299. Dispersion of ultrasonic waves in liquids, I, 309.
- and Bronder, O., infra-red absorption spectrum of silicates, I, 7.
- Matras, A., modern therapy of gonorrhœa, III, 179.
- Matricon, M., high-speed oil-vapour condensation pumps, I, 627.
- Matschulan, G., and Amsler, C., prolongation of local anaesthetic action of cocaine substitutes by morphine and egg white, III, 1003.
- Matson, E. J. See Shriner, R. L.
- Matsuda, R., and Nishimori, T., electrolytic formation of persulphate. V. With alternating current superimposed on direct current, I, 329.
- Matsushashi, M. See Ishikawa, S.
- Matsukawa, T. See Fujii, Katsuya.
- Matsumoto, H., action of diethylaminomethylphenedrine (isalon) on circulation, III, 777.
- Matsumoto, T. See Tsujimoto, M.

- Matsumura, K., identification of 4-nitro-acridone-1-carboxylic acid [by conversion into] 4-aminoacridine, II, 521.
- Matsuoka, H. See Higasi, T.
- Matsuoka, M., subjective symptoms after injection of 17-methylandrostanol-3-one, III, 984.
- Matsumita, K. See Kawaguchi, R.
- Matsumiya, H., thermal analysis of second-order reaction, I, 149. Thermal analysis of oxidation of sulphites. I. Oxidation of [sodium] acid sulphite by iodate, I, 150.
- Mattauch, J., sub-standards in mass-spectrography, I, 114. Advances in nuclear physics as a result of progress in apparatus and methods, I, 297.
- and Lichtblau, H., bands in mass-spectrography, I, 114. Isotope of lutecium, I, 169. Isotopic constitution and at. wt. of molybdenum, I, 231.
- Mattauch, F., vasodepressant action of *Viscum album* extracts, III, 90.
- Matthes, I. See Kolhorster, W.
- Matthes, K., and Gross, F., absorption of red and ultra-red light by carbon monoxide-saturated, oxygen-saturated, and reduced blood, III, 825. Registration of the light absorption of blood in two different regions of the spectrum, III, 825. Registration of CO-haemoglobin in blood stream, III, 825. Registration of human blood, III, 825. Detection of methaemoglobin and CN-methaemoglobin in blood stream, III, 825.
- and Hauss, W., photo-electric plethysmography, III, 20.
- See also Isaac, C.
- Matthew, G. D. See Thomson, S.
- Matthews, B. H. C. See Barron, D. H., Fessard, A., Keys, A., and Matthews, L. H.
- Matthews, F. L., Crist, R. H., and Knoll, A., new light sources for colorimetry, I, 580.
- Matthews, H. P., centrifuges, I, 45.
- Matthews, J. B., influence of carbohydrate substances on interfacial tension between water and cyclohexane, I, 520.
- Matthews, J. E., jun. See Dow, R. B.
- Matthews, L. H., visual stimulation and ovulation in pigeons, III, 478.
- and Matthews, B. H. C., owls and infra-red radiation, III, 752.
- Matthews, N. L., Curtis, G. M., and Brode, W. K., determination of iodine in biological materials, III, 222.
- Matthews, R. S., pellagra and nicotinic acid, III, 288.
- Matthews, W. F. See Maliner, M. M.
- Matthijssen, E. See Nieuwenhuizen, C. L. C. van.
- Matti, J. See Barbieri, J.
- Mattikow, B. See Weinstein, J.
- Mattli, K. F. See Whitmore, F. C.
- Mattoon, R. W. See Harkins, W. D.
- Matuda, H., surface tension of urine and serum in surgical kidney diseases, III, 694.
- Matula, J., physicochemical investigations with methylated glutin, II, 234.
- Matzdorff, P., reflex migraine, III, 834.
- Matzenok, E. A. See Zdanovski, A. B.
- Matzke, J. See Spath, E.
- Matzner, K. H., vitamin-C in alveolar phagocytes, III, 167.
- See also Tonutti, E.
- Matznevitch, I. K., chondrilla resins, II, 31.
- Maucher, H., systems copper-germanium and silver-germanium, I, 17.
- Maucherat, (Mlle.) M., vapour pressure of lithium between 462° and 642°, I, 190.
- Mauer, G., histiogenesis of the Rous sarcoma, III, 157. Trypallavin in mice infected with psittacosis, III, 205.
- Maughan, G. B., Evelyn, K. A., and Browne, J. S. L., determination of glucuronic acid and conjugated glucuronides [in urine], III, 154.
- Maughan, G. H., effects of thymus removal in chickens, III, 39.
- Mauguin, C., and Laval, J., Fourier lattice and thermal agitation, I, 358.
- Maume, L. See Lagatu, H.
- Maunsell, J. J. See Hughes, G. K.
- Maurel, A. See Cornubert, R.
- Maurer, F. W., absorption of acid indicator dyes by living frog muscle, III, 242. Isolation and analysis of extracellular muscle fluid from the frog, III, 369.
- Maurer, S. See Wiles, H. O.
- Maurer, W., excitation of light by ionic and atomic collision, I, 167.
- and Fisk, J. B., transformation of boron by slow neutrons with production of α -particles and protons, I, 349.
- Maurmeyer, R. K. See Niederl, J. B.
- Mauthner, F., synthesis of a new glucogallie acid, II, 99. Synthesis of 6-hydroxy-8-methoxycoumarin, II, 173.
- Mautner, V. See Weber, K.
- Mavity, J. M. See Grosse, A. V.
- Mawson, C. A. See Mills, J.
- Max, H. J. See Smith, A. K.
- Maxia, C., prolactin and the melanophore-dilating reaction in fish scales, III, 137.
- Landau, G., and Ferretto, F., spodographic examination of salivary glands of mammals, III, 146.
- Maxim, M. See Pamfil, G.
- Maxim, N., Zugravescu, I., and Fulga, I., action of mixed organomagnesium compounds on *N*-substituted 2-furoamides, II, 485.
- Maximov, N. A., increase in permeability of protoplasm in wilting plants, III, 730.
- Gocholashvili, M. M., and Tschoidze, V. I., root formation induced by heteroauxin in cuttings of subtropical plants which show difficulty in rooting, III, 732.
- Maximov, V. I., Nikonova, Y. V., Lazarev, A. F., and Zvereva, L. A., synthesis of *l*-ascorbic acid (vitamin-C), II, 533.
- Maxted, E. B., and Evans, H. C., distribution factor in catalytic toxicity, I, 87.
- Maxted, W. R. See Fuller, A. T.
- Maxwell, C. B. See Blicke, F. F.
- Maxwell, James, staphylococcal septicæmia treated with M. & B. 693, III, 179.
- See also Thomas, C. P.
- Maxwell, Jane, inactivation of sperm by X-radiation in *Habrobracon*, III, 683.
- Maxwell, J. P., Pi, H. T., Lin, H. A. C., and Kuo, C. C., adult rickets (osteomalacia) and foetal rickets, III, 769.
- Maxwell, L. R., and Kempton, J. H., delayed killing of maize seeds X-rayed at liquid-air temperature, III, 1017.
- May, A., potential energies of the alkali halides: errata and extension of the semi-empirical formula, I, 11.
- May, A. N., extinction of discharges in Geiger-Müller counters, I, 176.
- May, C. D. See Blackfan, K. D.
- May, E., and Tiffeneau, R., effect of excessive dosage of protamine-zinc-insulin, III, 1050.
- May, (Miss) E. L. See Mosettig, E.
- May, E. M. See Kharasch, M. S.
- May, E. W., and Wygant, T. M., antirachitic treatment, III, 852. Value of irradiated evaporated milk in prevention of rickets in premature, weakling, and normal full-term infants, III, 923. Evaluation of methods of antirachitic treatment, III, 995.
- May, F., and Stadelmann, L., tetrasaccharide in the eggs of *Helix pomatia*, III, 978.
- and Weinbrenner, H., deposition of alactogen in warm-blooded animals, II, 299.
- May, H., and Litzka, G., inhibition of tumour growth by fluorotyrosine, III, 598.
- May, H. B., and Buck, S. C., sulphonamides in experimental anthrax, III, 1082.
- May, K., M. & B. 693 in pneumococcal meningitis, III, 774.
- May, O. E. See Moyer, A. J.
- May, R., action of acetylcholine on diarrhoea in Graves' disease, III, 777.
- May, R. L. See Smith, G. F.
- May, S. H., electrocardiographic responses to oxygen lack, III, 820.
- Maybaum, J. L., Snyder, E. R., and Coleman, L. L., value of sulphanilamide in otogenous infections, III, 857.
- Maycock, R. L. See Buswell, A. M.
- Maycock, W. d'A., and Heslop, T. S., nerve supply of adrenal medulla of cat, III, 1039.
- See also Hill, M.
- Mayeda, S. See Higasi, T.
- Mayeda, Y. See Suzuki, T.
- Mayer, A. See Chevillard, L., and Gasnier, A.
- Mayer, F. See Nottbohm, F. E.
- Mayer, G. See Klein, M., and Sellei, C.
- Mayer, J. E., statistical mechanics of condensing systems. V. Two-component systems, I, 128.
- Mayer, K. See Dirr, K.
- Mayer, L. L., dilatation of the pupil for ophthalmoscopic examination, III, 835.
- Mayer, M. See Aschheim, S.
- Mayer, N., inhibition of glycolysis, III, 855.
- Mayer, R. L., effect of 2-*p*-aminobenzene-sulphonamidopyridine in *B. coli* and staphylococcus infections in the mouse, III, 305. Chemotherapy of tetanus; effect of sulphamides on *B. tetani* and its toxin; mechanism of the neutralisation of tetanus toxin by aminobenzene-sulphamide *in vitro*, III, 877.
- and Gschlin, C., antibacterial action of *p*-nitrobenzoic acid and its esters, III, 531.
- Mayer-Gross, W. See Walk, A.
- Mayer-Gurr, A., occurrence of helium and the accompanying geological and physical phenomena, I, 106.
- Mayers, M. A., reduction of carbon dioxide by graphite and coke, I, 527.
- Mayers, M. R. See Greenburg, L.
- Mayerson, H. S., Sweeney, H. M., and Toth, L. A., influence of posture on circulation time, III, 658.
- Maynard, C. W., efficient paraffin bath, III, 546.
- Maynard, C. W., jun. See Hockett, R. C.
- Maynard, J. L., Barber, H. H., and Sneed, M. C., qualitative procedure for analysis of group II, I, 337.

- Maynard, L. A. See Rasmussen, R.
 Mayne, A. See Petersen, W. F.
 Mayo, C. W. See Lovelace, W. R.
 Mayo, F. R. See Kharasch, M. S., and Walling, C.
 Mayoux. See Enselsma.
 Mayr, C., and Gebauer, A., elucidation of the macro- and micro-reaction of iron with thioglycolic acid, I, 387.
 and Proding, W., α -nitro- β -naphthol as precipitant for cobalt and palladium,
 Maytum, C. K., sighing dyspnoea, III, 125.
 Helium and oxygen treatment of intractable asthma, III, 367.
 and Leddy, E. T., Roentgen treatment of asthma, III, 461.
 See also Huber, H. L.
 Mazars, G. See Duval, C.
 Mazé, P., and Mazé, P. J., jun., curative action of maize leaf juice on chlorosis produced by manganese or zinc lack, III, 340. Culture of maize in two independent, complementary, nutrient solutions, III, 881.
 Mazé, P. J., jun., and Anxionnaz, R., variation in [plant] cellular function according to the composition and concentration of the nutrient solution. I. and II., III, 634, 730.
 Mazé, P. J., jun. See Mazé, P.
 Maze, R. See Auger, P.
 Mazer, C., and Mazer, M., treatment of dysfunctional uterine bleeding with testosterone propionate, III, 686.
 and Shechter, F. R., treatment of vulvovaginitis with oestrogen, III, 912.
 See also Mazer, M.
 Mazer, M., and Mazer, C., effect of prolonged testosterone propionate administration on the immature and adult female rat, III, 589.
 See also Mazer, C.
 Mazille, M., fixation of dyes by blood-globulin, III, 118. Unipolar electro-dialysis of serum, III, 229.
 See also Doladilhe, M.
 Mazov, A. V., test of suitability of pyrogallol solutions [for absorption of oxygen], I, 38.
 Mazur, J., relation between specific heat and temperature for nitrobenzene, I, 189.
 Sensitive pressure and temperature measurement, I, 339. Anomalous thermal expansion of carbon disulphide at low temperatures, I, 604.
 Mazza, F. P., dehydrogenation of phenyl-aliphatic acids by liver enzymes, III, 998.
 and Lenti, C., glycolysis of nervous tissue, III, 28.
 and Migliardi, C., α -(*p*-aminobenzene-sulphonamido)-acids and their derivatives, II, 112. Catalytic reduction of camphorquinone in presence of methylamine; 3-methylamino-2-hydroxycamphane and its pharmacodynamic properties, II, 272. Azoderivatives of chemotherapeutic compounds of the sulphonamide type with diuretic compounds of the purine group, II, 346.
 Mazzaracchio, V., purification of precipitins by saturation. I. II. Identification and differentiation of the milk of cow, ewe, and goat. III. Serological differentiation of the [blood]-albumin of man from that of monkey, III, 338.
 Mazzarella, R. See Cardone, E.
 Mazzini, L. Y., reliable, sensitive, simple, and rapid slide flocculation test for syphilis, III, 631.
 Mazzocco, P., rhythmic oscillations in carbohydrate metabolism in the toad, III, 501. Seasonal variations in the liver of *Bufo arenarum*, III, 691.
 Mazzola, V. P., endometrial hyperplasia (puberty), adenocarcinoma, fifteen years follow-up, III, 381.
 Mchitarian, V. G., high mol. wt. esters of ortho-acids, II, 271.
 Mead, D. J., and Fuoss, R. M., dependence of conductance on field strength. I. Tetrabutylammonium picrate in diphenyl ether at 50°, I, 525.
 Mead, F. B. See Dragstedt, C. A.
 Mead, T. H., crystalline esters of vitamin A. I. Preparation and properties, III, 601.
 See also Lovern, J. A.
 Meade, J. R. See Burch, E. P.
 Meader, F. M. See Hyland, C. M.
 Meader, R. G. See Marshall, C.
 Meakins, J. C., and Hanson, F. R., treatment of pneumococcal pneumonia with sulphapyridine, III, 857.
 Means, J. H., and Lerman, J., relation of thyroxine decay in myxoedema and iodine response in thyrotoxicosis, III, 256.
 Mears, W. L. See Malkin, T.
 Mears, W. H., and Sobotka, H., heavy oxygen exchange reactions of proteins and amino-acids, I, 333.
 Mecchi, E. See Almquist, H. J.
 Meck, J. S., and Acree, E. G., attempted transformation of rabbit-fibroma virus into virus of infectious myxoma, III, 991.
 Mecke, R. See Kemper, H.
 Meckies, H. See Steinkamm, E.
 Mecl, A. See Horejšil, J.
 Medes, G. [with Gulezian, N.], metabolism of sulphur. VIII. Oxidation of sulphur-containing amino-acids by enzymes from the liver of the albino rat, III, 1077.
 and Vitanza, I., metabolism of sulphur. IX. Non-production of glycogen from cystine, cysteine, and methionine and their partly oxidised derivatives, III, 1077.
 Medical Research Council, report, III, 736.
 Medinski, C. B., reaction between sulphur dioxide and oxides of nitrogen, I, 274.
 Medovschschikov, N. G. See Juriev, J. K.
 Meduna, L., genesis of cardiazol treatment of schizophrenia, III, 832.
 and Friedman, E., convulsive-irritative therapy of the psychoses, III, 572.
 and Rohny, B., insulin and cardiazol treatment of schizophrenia, III, 672.
 Medvedev, G., kinetic theory of alcoholic fermentation, III, 520.
 Medvedev, S. S., rôle of peroxides in oxidation of hydrocarbons, I, 149.
 Medvedeva, N. B., autocatalytic function of the liver, III, 272. Action of folliculin on reproduction of coelenterata (*Hydra*) and insects (*Drosophila*), III, 382. Chemical tissue changes in forms of shock, III, 499.
 See also Ermakov, M. B.
 Meek, J. M. See Allibone, T. E.
 Meek, S. F. See Harrold, G. C.
 Meek, W. J. See Beyer, K. H.
 Meen, V. B., Maria Elena meteorite, I, 107.
 Cleavage-luminescence of mica, I, 344.
 Meerapfel, O. See Scott, G. A.
 Meerman, P. G., and Scholten, W., system $\text{HgCl}_2\text{--HgBr}_2$, I, 524.
 Meerwein, P. See Chioléro, J.
 Meerwein, H., Büchner, E., and Emster, K. van, reaction of aromatic diazo-compounds with $\alpha\beta$ -unsaturated carbonyl compounds, II, 262.
 Meese, J. See Maintz, M.
 Meesen, K. See Reinartz, F.
 Megaw, H. D., thermal expansion of crystals in relation to their structure, I, 135. Density and compressibility of solid hydrogen and deuterium at 4-2° K., I, 461.
 Meggers, W. F., standard wave-lengths, I, 490.
 and Scribner, B. F., index to literature of spectrochemical analysis, I, 334.
 Meherin, J. M., and Schomaker, T. P., the cement burn, III, 783.
 Mehl, J. W. See Edsall, J. T.
 Mehl, R. F., and Rhines, F. N., simultaneous diffusion of nickel and silicon in solid copper, I, 606.
 See also Johnson, W. A.
 Mehler, E. See Hahn, A.
 Mehlig, J. P., colorimetric determination of manganese with periodate, I, 431.
 Mehmed, F. See Haraldsen, H.
 Mehnen, H., bile and pancreatic duct openings and gall stones, III, 150.
 Mehra, R. K., and Pandya, K. C., condensation of aldehydes. III. *p*-Tolu-aldehyde with amides. XI. *p*-Tolu-aldehyde with malonic and malonanilic acid, II, 478.
 Mehta, C. R., seed-oil of *Oroxylum indicum*, Vent., III, 884.
 Mehta, M. L. See Singh, B. N.
 Mehta, S. M., and Kabadi, M. B., electrical conductivity of solutions containing zinc hydroxide and sodium hydroxide, I, 471.
 Mehta, T. N., and Thosar, V. B., reaction of aromatic diamines with ethyl malonate, II, 256.
 Meidinger, W., mass and distribution of photolytically produced silver in silver bromide-gelatin emulsions. IV. Dependence of the mass on temperature, I, 208. Fluorescence and phosphorescence of photographic layers of silver halides in gelatin at low temperatures, I, 509.
 Meier, A. E., and Tomlinson, W. H., harmotome from Delaware Co., Pennsylvania, a barium zeolite of hydrothermal origin, I, 344.
 Meier, R., and Müller, Reinhard, arrangement for registration of diaphragm movements, III, 124.
 Meier-Konstmann, J., veritol, III, 310.
 Meigs, J. Y., report on progress in gynaecology, III, 583.
 Meijer, T., and Koolhaas, D. C., variations in the constituents of the roots of *Curcuma zanthorrhiza*, Roxb. ("temoe lawak"), at different times of the year, III, 536.
 Meijling, H. A., structure and innervation of the carotid glomus and carotid sinus, III, 444.
 Meiklejohn, A. S., water-soluble vitamins, III, 918.
 Meinrath, H. See Pien, J.
 Meirhaeghe, A. van. See Bessemans, A.
 Meisel, K., crystal structure of thorium phosphides, I, 243. Crystal structures of metallic scandium, I, 305.
 See also Biltz, W., and Wiechmann, F.

- Meisenheimer, J., and Campbell, N., oximes. II. Beckmann change, II, 372.
- and Chou, L. H., attempted resolution of substituted cyclic ethyleneimines into optically active isomerides, II, 359. Oximes. I. Ketoxime *N*-methyl ethers, II, 372.
- and Ditt, F. W., anthracene and phenazine derivatives, II, 362.
- and Gaiser, G., oximes. III. Constitution of oximes, II, 372.
- and Kappler, A., oximes. IV. Stereoisomeric oximes of *p*-dimethylamino-benzophenone, II, 372.
- Meisenheimer, M. See Bamann, E.
- Meissel, M. N., alterations of chondriosomes of yeast during respiration and fermentation, III, 425.
- Meister, H. See Fierz-David, H. E.
- Meister, M. See Price, C. C.
- Meites, M., effect of benzenated water on development of rootlets of white lupin, III, 949.
- Meitner, L., new products of the fission of the thorium nucleus, I, 350.
- and Frisch, O. R., products of the fission of the uranium nucleus, I, 233. Disintegration of uranium by neutrons: new type of nuclear reaction, I, 233.
- Meixner, H., fluorescence experiments with secondary uranium minerals, I, 497.
- Meixner, J., Wiedemann-Franz law for metals of any crystal structure in any magnetic field, I, 65.
- Mejbaum, W., determination of pentose especially in adenylic acid derivatives, II, 195.
- Mélas-Joannidès, Z., ascorbic acid in citrus fruits [in Greek], III, 852.
- Melchers, G., blossom hormone, III, 882.
- Melchionna, R. H., and Flanders, S., physiological response of ocular transplants of the seminal vesicle in female rabbits, III, 51.
- and Moore, R. A., the pharyngeal pituitary gland, III, 136.
- Meldahl, H. F. See Ruzicka, L.
- Meldolesi, G., Siedel, W., and Moller, Hans, myobilin. I, II, 394.
- Meleney, F. L. See Zaytzeff-Jern, H.
- Melentiev, B. N. See Volkova, M. I.
- Melicher, B., and Vsetěka, L., microvolumetric determination of uric acid in biological material, III, 1020.
- Melik-Ogandjanoff, T. See Carnot, P.
- Melin, K. See Bengtsson, G.
- Mellanby, E., experimental production of deafness in young animals by diet, III, 135. Bone overgrowth and nerve degeneration produced by defective diet, III, 918.
- See also Harrison, D. C.
- Mellanby, H., development of teeth in the albino rat, III, 762.
- Mellanby, J., and Suffolk, S. F., quantitative investigation into enterohepatic circulation of bile salts in the cat, III, 594. Experimental oligocythæmia and splenomegaly, III, 741.
- See also Leathes, J. B.
- Mellanby, K., functions of insect blood, III, 810.
- Mellander, A., thermodynamic dissociation constants of α -alkylsulphonylpropionic acids, I, 611. Racemisation of optically active α -alkylsulphonylpropionic acids, I, 618.
- Mellander, O., electrophoretic investigation of casein, III, 540.
- Mellen, W. See Veal, J. R.
- Mellgren, J., reservoir blood of cat spleen (hemolysis and sedimentation reaction), III, 234.
- Mellinghoff, K. See Schulze, E.
- Mellish, C. H. See Meyer, R. K., and Orth, O. S.
- Mellon, M. G., present status of colorimetry, I, 221.
- See also Byers, D. H., and Fortune, W. B.
- Mellon, R. R. See Locke, A., Main, E. R., and Shinn, L. E.
- Mellor, D. P., unit cell and probable space-group of strontium hydroxide octahydrate, $\text{Sr}(\text{OH})_2 \cdot 8\text{H}_2\text{O}$, I, 407.
- and Morris, B. S., dimorphism of dipyrindine cobaltous chloride, II, 176.
- Melmore, S., spectroscopic power of a human eye due to injury, III, 835.
- Melnick, D., and Field, H., jun., quantitative enzymic conversion of co-carboxylase (vitamin- B_2 pyrophosphate) into free thiamin, III, 286. Determination of vitamin- B_2 . I. Reaction between aneurin in pure, aqueous solution and diazotised *p*-aminoacetophenone. II. Determination of the aneurin content of biological materials with the diazotised *p*-aminoacetophenone reagent. III. Quantitative enzymic conversion of co-carboxylase (aneurin pyrophosphate) into the free vitamin, III, 402. Determination, stability, and form of thiamine in urine, III, 993. Vitamin- B_2 -sparing action of fat, III, 1069.
- Melnikov, N. N., selenious anhydride as an oxidising agent in organic chemistry, II, 1. Organic derivatives of boron. II. Analysis of arylboric acids, II, 292. and Rokitskaja, M. S., mechanism of oxidation of organic substances with selenium dioxide. III. Oxidation of metallo-organic compounds. IV. Kinetics of oxidation of ketones. V. Kinetics of oxidation of aldehydes, I, 327, 616; II, 53. Organic derivatives of boron. III. Synthesis of aryl- and diaryl-boric acids, II, 292.
- Melnikov, O. A., law of interstellar absorption, I, 229.
- Meltya, N. N. See Joffe, J. S.
- Melton, G., M. & B. 693 in urinary infections, III, 611.
- Meltsner, M. See Kremer, C. B.
- Meltzer, H., and Heuser, H., inorganic composition of normal thyroid glands, colloidal diseases of the thyroid, and hyperthyroidism, III, 679.
- and Kührt, E. H., influence of X-rays on inorganic composition of the skin, III, 318. Action of X-rays on inflammation, III, 318.
- Melville, D. B. See Carter, H. E.
- Melville, H. W., and Birse, E. A., photochemistry of ammonia, I, 153.
- See also Gee, G.
- Melville, K. I., cardiac response to posterior pituitary extract as affected by sodium phenobarbital, III, 714.
- Melville, R. See Bolas, B. D.
- Melvin, E. H. See Wulf, O. R.
- Melzer, L. See Euler, H. von.
- Mendel, B., experimental insulin and metrazol shock. II. Glycolysis of brain slices, III, 249.
- Mendelssohn, J., and Mendelssohn, K., specific heat of a substance showing spontaneous electric polarisation, I, 603.
- Mendelssohn, K. See Berg, W. F., Daunt, J. G., and Mendelssohn, J.
- Mendenhall, E. E. See Hovorka, F.
- Mendez, L. See Chavez, J.
- Mendive, J. See Wernicke, R.
- Mendlowitz, M., [vascular responses in] clubbed fingers, III, 237.
- Mendoza, H. C. See Diaz, C. J.
- Mends, J. R. See Bury, C. R.
- Menees, T. O., and Miller, J. D., thorium hydroxide sols as opaque media in roentgenography, I, 23.
- Meneghetti, E., permeability of reticulo-endothelial elements to colloids, III, 15.
- Menendez, B., semimicro- and microchemical study of genalkaloids (genstrychnine and genatropine), II, 294.
- Mengel, J., gas circulation apparatus, I, 390.
- Mengle, H. A. See Bower, J. O.
- Menk, W., and Mohr, W., action of atebirin in lambliosis, III, 1084.
- Menke, W., fine structure of chloroplasts, III, 213. Protoplast of green plant cells. I. Isolation of chloroplasts from spinach leaves, III, 220.
- Menkin, V., direct effects of changes in p_{H} on leucocytes, III, 349. Difference between histamine and leucotaxine, III, 818.
- and Kadish, M. A., physiological effects of leukotaxine, III, 548.
- Mennega, A. M. W. See Vonk, H. J.
- Menner, A., relation between cell size and size of animal, III, 740.
- Menon, A. S., mineral and nitrogen content of South Indian pasture grasses, III, 1019.
- Menon, T. B., visceral lesions in simian malaria with special reference to the splenic reaction, III, 426. Splenic reaction in kala-azar, III, 743.
- Mensching, J. See Rietschel, H.
- Mentzer, C. See Meunier, P.
- Mentzer, M. C., Corteggiani, E., and Carayon-Gentil, A., acetylation of choline, and biological determination of small amounts in extracts of organs, III, 735.
- Menut, (Mlle.) M. L. See Dupont, G.
- Menz, H., influence of electric field on viscosity of liquids, I, 311.
- See also Buchheim, W.
- Menzel, A. E. O., and Heidelberger, M., specific and non-specific cell polysaccharides of a bovine strain of tubercle bacillus, III, 334.
- Menzel, D. H., Aller, L. H., and Baker, James G., physical processes in gaseous nebulae. IV. Mechanistic and equilibrium treatment of nebular statistics, I, 56.
- See also Aller, L. H., and Baker, James G.
- Menzer, G., amethysts from Brandberg, German S.W. Africa, I, 288.
- Menzies, A. C., fine structure of the Raman lines of carbon tetrachloride, I, 550.
- Meranze, D. R. See Copperman, M. B., Muschat, M., and Shay, H.
- Meranze, T. See Shay, H.
- Mercer, E. H., spreading of paraffin oils containing fatty acids on aqueous solutions of calcium ions, I, 468.
- Mercer, S. R., recurrent lymphangitis treated with sulphanilamide, III, 1080.
- Merciadri, A. See Algostino, E.
- Mercier, A., characteristic energy of the electron, I, 176.
- Mercier, F., and Delphaut, intracisternal injection of glucosides of *Adonis vernalis*, III, 190.
- Delphaut, J., and Bonjart, M., intracisternal injection of autonomic nerve poisons, III, 181.

- Mercier, F., Delphaut, J., and Casanova, J., effect of subdural injection of sulphonamide compounds, III, 1000. Effects of subdural injection of rubiazol, III, 1003.
- and Macary, S., biological determination of the glucosides of *Adonis vernalis*, III, 951.
- and Vignoli, L., pharmacology of Assonbo-kan, III, 1002.
- See also Juillet, A.
- Mercier, L., spleen grafts in lymphosarcomatous mice, III, 847.
- Mercier, P., and Joyet, G., separation of light positive and negative ions by attainment of a single sign in charged air currents, I, 222.
- See also Peyron, A.
- Merkel, J. H. C., maximum density and compressibility of salt solutions, I, 363.
- and Haayman, P. W., influence of salts on the m.p. of gelatin jellies, I, 320.
- Meredith, H. V., stature of Massachusetts children of North American and Italian ancestry, III, 544.
- Mereshinski, M. F., influence of insulin on redox potential of the blood of schizophrenics, III, 250.
- and Kligman, M. I., effect of insulin on glutathione content of the blood of schizophrenics, III, 976.
- Merideth, G. T. See Broxon, J. W.
- Mérigoux, R., and Aubry, M., phenomena of adsorption between liquid phases; analysis of curves, I, 608.
- See also Trillat, J. J.
- Meriwether, L. S., syncope, III, 380.
- Merkel, H. See Kautsky, H.
- Merkelbach, O., photobiological problems, III, 95. Latent myxœdema, III, 840.
- Merker, E., physiological performance of fish eyes in ultra-violet light, III, 674. Electrolyte content of fresh water as protection against light, III, 937.
- Merklen, F. P. See Bénard, H.
- Merksamer, D., and Kramer, B., Nicmann-Pick's disease, III, 407.
- Merling-Eisenberg, K. B., microscopical observations on bacteriophage of *Bact. coli*, III, 334.
- Merlo, P., increased blood-lipins and -ketones during insulin hypoglycæmia, III, 680.
- Mermod, C. See Perrier, A.
- Merriam, R. See Macdonald, G. A.
- Merrill, A., Williams, J. R., and Harrison, T. R., site of action of the renal pressor substance, III, 23.
- Williams, R. H., and Harrison, T. R., effects of a pressor substance obtained from the kidneys on renal circulation of rats and dogs, III, 123.
- Merrill, H. J., and Webb, H. W., electron scattering and plasma oscillations, I, 441.
- Merritt, C. A., iron ores of the Wichita mountains, Oklahoma, I, 585.
- See also Wood, F. C.
- Merritt, D. T., jun. See Lutz, R. E.
- Merritt, H. H. See Rosenbaum, M.
- Merritt, L. L., jun., Levey, S., and Cutter, H. B., sodium saccharin as a reagent for identification of alkyl halides, II, 96.
- Merten, R., action of anterior pituitary on liver-glycogen, III, 676.
- and Hinsberg, K., action of purified anterior pituitary extracts on blood-sugar and -lactic acid, III, 676. Anterior pituitary and carbohydrate metabolism, III, 974.
- See also Hinsberg, K.
- Mertens, E., coproporphyrin-III [in the faeces] in chronic congenital porphyria, III, 843.
- Mertens, W. See Bräuner, H.
- Mertens, Willi. See Nagel, Werner.
- Mertie, J. B., jun., Nushagak district, Alaska, I, 343. Platinum placers of the Goodnews Bay district, Alaska, I, 345.
- Mertzlin, R. V., equilibria of three liquid phases in ternary systems, I, 265. Equilibria in systems involving salting-out, I, 612.
- and Shuravlev, E. F., connexion between conductivity of binary liquid systems and their solubility in a third component, I, 71.
- Merwe, A. J. van der. See Walt, C. F. J. van der.
- Merwin, H. E., and Posnjak, E., clays and other minerals from the deep sea, hot springs, and weathered rocks, I, 288.
- See also Kracek, F. C., Ksanda, C. J., and Tunell, G.
- Merz, K. W., and Tschubel, H., vanguardin; new saponin from *Vanqueria tomentosa*, II, 333.
- Mes, M. G., and Bot, G. M., water relations of grasses. II. Comparison between sugar content and daily variations in water content of the leaves of *Themeda triandra*, Forsk., III, 1108.
- Meschau, I. See Quigley, J. P.
- Meschtscheriakov, A. P., and Kaplan, E. P., isomerisation of *n*-octane, II, 295.
- Mesech, H. See Jander, G.
- Mesée, H. J. See Hein, F.
- Meserve, M. F., effect of X-radiation on growth and respiration of narcissus bulbs, III, 213.
- Meservey, A. B. See Pierce, H. B.
- Mesina, R. See Gerioli, F.
- Mesnage, P., spectra of molybdenum chlorides, I, 448. High-frequency discharges and their application to molecular spectroscopy, I, 508.
- Mesnard, P., cuprohydrocyanide reagent as a precipitant for methylene-blue, II, 12. Complex cuprohydrocyanide of hexamethylenetetramine, II, 12.
- Mesrobian, L. See Boivin, A.
- Messeloff, C. R., use of quinidine sulphate in children, III, 506.
- Messerli, F. M. See Lederer, H.
- Messimy, R., effects of ablation of prefrontal lobes in the monkey, III, 468.
- and Chevallier, R. J., ablation of forebrain in rabbit, III, 970.
- See also Guillaing, G.
- Messinger, E., cardiovascular changes in insulin shock treatment, III, 262.
- Metelnikoff, S., Yakimach, A., and Yadoff, O., effect of radioactive rays on bacteria, III, 622, 880.
- Metelmann, J., treatment of mustard gas wounds with camomile, III, 504.
- Methling, H., action of eldoral in chronic alcoholism and veronal addicts, III, 185.
- Metropolis, N., new ultra-violet band system of silver iodide, I, 298.
- Metson, A. J. See Parton, H. N.
- Metten, H., reproduction of the dogfish, III, 386.
- Mettler, F. A., Ades, H. W., Lipman, E., and Fuller, E. A., extrapyramidal system: experimental demonstration of function, III, 668.
- See also Ades, H. W.
- Metzger, J. See Coste, F.
- Metzger, M. A. See Bryan, A. H.
- Metzger, N. See Baumann, E. J.
- Meulen, J. H. van der, bromo-iodometric investigations. X. Determination of both constituents in an iodate-bromate mixture. XI. Is the Hahn fluorescein reaction specific for bromine? I, 383, 624. Determination of hydrofluoric acid and of "uncombined" acid in alkali and ammonium fluorides, I, 429. Determination of hydrogen peroxide and persulphate in the same solution, I, 486. Ferromolybdate reagent for the detection of small quantities of phosphoric acid, silicic acid, arsenic acid, and arsenious acid, I, 534.
- Meulen, P. A. van der. See Kienle, R. H.
- Meulengracht, E., histologic investigation into the pyloric gland organ in pernicious anemia, III, 548. Intermittent juvenile jaundice, III, 594. Osteomalacia of spinal column. I. From deficient diet. II. Osteomalacia achylia. III. Osteomalacia from overdosage with purgatives, III, 1073.
- See also Lundstein, E.
- Meunier, A. C. See Simons, J. H.
- Meunier, P., and Blancpain, C., determination of the antineuritic vitamin in natural substances, III, 602. Joint chemical determination of vitamin-B₁ and cocarboxylase, III, 920.
- and Mentzer, C., determination of ascorbic acid in milk, III, 403.
- and Raoul, Y., vitamin requirements of animals as a function of their size, III, 399.
- See also Raoul, Y.
- Meunier, V. C. See Whitmore, F. C.
- Meurice, R., solubility curve of phosphoric acid in citric acid, I, 253. Volumetric analysis; cause of error often overlooked; liquids should not be measured by volume, I, 533.
- Meuwissen, T., and Noyons, E. C., vitamin-C content of normal human urine, III, 290.
- Meyer, A., and Jones, T. B., histological changes in the brain in Mongolism, III, 671.
- See also MacKeith, S. A.
- Meyer, André, and Drutel, H., formation of isocyanine dyes by intermolecular condensation of 4-chloroquinaldines, II, 85.
- Meyer, A. E., and Wertz, A., calorogenic efficiency of thyroid material in relation to thyroxine and to iodine content, III, 679.
- and Yost, M., stimulating action on metabolism and heart beat of various thyroid preparations in the thyroid-ectomized rat, III, 908.
- Meyer, C., and Shaffer, F., paramesium: antigenic properties, III, 201.
- Meyer, C. E. See Williams, Roger J.
- Meyer, E., *Staphylococcus epidermis albus*; cultural and immunological reactions of large and small colony types, III, 944.
- Meyer, E. G., climate of heated rooms, III, 620.
- Meyer, F., nomogram for calculation of the aortic measurements and stroke volume of the heart, III, 18. Oxygen tension in the kidney, III, 151. Photoelectric manometer, III, 221.
- Meyer, F. L. See Hathaway, M. L.
- Meyer, F. R. See Fricke, R.
- Meyer, G. M. See Levene, P. A.

- Meyer, H. (Turin), prolonged cultivation of nerve tissue *in vitro*. IV., III, 244. Summated muscular contractions during stimulation with rectangular currents, III, 463.
See also Jablonski, W.
- Meyer, Hildegard. See Zeile, K.
- Meyer, H. H., isolation of crystalline l-ascorbic acid from the tonsils of man and of the ox, III, 496. Vitamin-C in tonsils, III, 852. Treatment of meningococcal meningitis with uleron, III, 999.
- Meyer, Jacques. See Sartory, A.
- Meyer, J. F. See Wagner, E. C.
- Meyer, Karl, Smyth, E. M., and Dawson, M. H., mucopolysaccharide from synovial fluid, III, 597.
See also Fleischer, G.
- Meyer, Klaus, spectrometric investigation of the state of chlorophyll in plants and in pure preparations, III, 219.
- Meyer, Kurt, Forssmann's hapten in the free and masked state, III, 434. Relations between antigenic factors of the *Salmonella* group, III, 727. Presence of an anti-protein antibody in anti-tubercular sera, III, 877. Different adsorbability of anti-lipin and anti-polysaccharide antibodies, III, 879.
- Meyer, K. F., principles in clinical immunology, III, 338.
- Meyer, K. H., constitution and crystalline structure of cellulose, II, 203. Protein molecule, III, 785.
Wolff, Everhard, and Boissonnas, C. G., heat of dilution in the system aceto-chou-*toluene*, I, 323.
See also Cherbuliez, E.
- Meyer, Madeleine, submicroscopic structure of the cutinised cell membrane, III, 445.
- Meyer, Martin, continuous extraction diffusion device, I, 494.
- Meyer, N. E., and Schotz, S., relief of intractable severe bronchial asthma with cyclopropane anaesthesia, III, 781.
- Meyer, O. O., achlorhydria in leukaemia, III, 114.
See also Pohle, F. J.
- Meyer, P., relation between concentration and colloid osmotic pressure of serum, III, 816.
See also Lumière, A.
- Meyer, R. C. See Roberts, R. B.
- Meyer, R. E. (Basle). See Furter, M.
- Meyer, R. E. (Pennsylvania). See Whitmore, F. C.
- Meyer, R. K., Mellish, C. H., and Kupperman, H. S., gonadotropic and adrenotropic hormones of the chicken hypophysis, III, 259.
See also Bunster, E., Foster, M. A., Hertz, R., Kupperman, H. S., McShan, W. H., and Spielman, M. A.
- Meyer, T. M., and Koolhaas, D. R., constituents of derris root. I. and II., II, 176, 484.
- Meyer, Walter, detection of lead poisoning by determination of porphyrin. II. Urine analysis, III, 615.
- Meyer-Hartmann, W., haematology and practice, III, 446.
- Meyer-Heck, P., glycolysis of erythrocytes in diagnosis of carcinoma, III, 917.
- Meyer-Wildisen, R., use of old test sera for agglutination, III, 351.
- Meyen, W. von, series spectrum of helium. I., I, 1.
- Meyerhof, O., isolation of glyceraldehyde-3-phosphoric acid in enzymic degradation of hexosediphosphoric acid. I. and II., III, 99, 324. Intermediate phosphorylation during glycolysis in brain extract, III, 301. Chemistry of anaerobic recovery of muscle, III, 367. Natural frequency and reversibility of volume constriction of muscle, III, 662.
- Meyers, M. P. See Sokolov, R. A.
- Meyler, L., Simmonds' disease, III, 136.
- Meystre, C. See Reichstein, T., and Sutter, M.
- Meythaler, F., and Gerstenberger, H. W., action of endogenous insulin on the liver during galactose assimilation, III, 173. Action of insulin on liver, III, 976.
- Mezey, K. See Kraus, M., and Staub, H.
- Mezzadrol, G., effect of short waves on development of plants, III, 622.
and Vicentini, V., influence of compounds containing the thiol group (cysteine, cystine, and glutathione) on cellular multiplication of *Saccharomyces cerevisiae*, III, 425.
- Mezzetti, A. See Thalheimer, E. J.
- Michael, A. [with Shadinger, G. H.], influence of solvents on stereochemical course of addition of hydrogen bromide to monobasic acetylenic acids and relation of solvent effect to chemical structure, II, 369.
and Carlson, G. H., 1:2- and 1:4-addition. III. Nitrogen trioxide and trimethyl-ethylene, II, 354.
and Weiner, N., partition principle as applied to structures of enolic sodium derivatives of β -diketones and β -ketoesters. III., II, 69.
- Michael, P. See Taylor, F. B.
- Michael, S. E., precipitation of proteins with complex salts, III, 885.
- Michaelis, L., Schubert, M. P., and Granick, S., free radicals of the type of Wurster's salts, II, 501.
- Michaelis, M. See Willstaedt, H.
- Michaelis, R. See Schonberg, A.
- Michaelis, W., nuclear size and distribution of binucleated cells in the human liver, III, 271.
- Michaelson, J. L., construction of a recording spectrophotometer, I, 43.
- Michail, D., and Vancea, P., effect of extracts of the ciliary body on tissue oxidation, III, 97. Changes in blood-chloride in ocular disease, III, 819. Effect of extracts of ciliary body on intraocular pressure, III, 903.
- Michailov, B. M., and Tschernova, N. G., synthesis of 10-alkyl derivatives of 9-methyl-1:2-benzanthracene, II, 149.
- Michailov, G. M., and Zvetkov, V. N., effect of magnetic and electric fields on streaming velocity of anisotropic liquid *p*-azoxyanisole in a capillary tube, I, 604. Influence of an electric field on the streaming velocity of anisotropic liquid *p*-azoxyanisole in a capillary, I, 604.
- Michailova, A. A. See Kusova, Z. B.
- Michailova, E. A., kinetics of the reaction between ammonia and nitric oxide on the surface of a platinum catalyst, I, 618.
- Michailova, V. V. See Borshkovski, S. E.
- Michailovskaja, V. I. See Plotnikov, V. A.
- Michalewicz, C., refractometric study of the system benzene-cyclohexane-carbon tetrachloride, I, 249.
- Michalowski, R., vital staining of centro-acinar cells of the pancreas of the guinea-pig, III, 269. Erythropoiesis in the mammalian embryonic liver, III, 446.
- Michalowski, S. S. See Baker, E. M.
- Michalski, E. See Hlasko, M.
- Michaltschischin, G. T., drop method of approximate determination of phosphoric acid, I, 38. Drop method of approximate determination of chromium, I, 41.
- Michaud, F., interfacial tension and adhesion, I, 257. Equilibria in gels, I, 469. Elastic reactions of gels, I, 611.
- Micheel, F., results in chemistry of carbohydrates, II, 49. Snake poisons. IX. X. Formation of thiol groups by the hydrolysis of snake poisons and albumins, III, 278, 395.
and Bode, G., snake poisons. VIII., III, 278.
and Schmitz, Heinrich, dl-methionine sulphoxide, II, 204. Behaviour of sulphoxides towards sulphite, II, 300.
- Micheev, M. P., stroboscopic revolution counter for calorimeters, I, 280.
- Michel, A., system palladium-hydrogen, I, 263.
and Gallissot, (Mlle.) M., relation between magnetic susceptibility and interatomic distances in hydrogenised palladium, I, 187.
See also Chaudron, G., Faivre, R., and Le Clerc, G.
- Michel, E. See Levy, Jeanne, and Simonnet, H.
- Michel, H. L. See Dieckmann, W. J.
- Michel, H. O., sulph-haemoglobin, II, 42.
See also Bernheim, F., and Harris, J. S.
- Michel, J., rate of crystallisation as a criterion of purity of organic compounds, I, 423.
See also Timmermans, J.
- Michel-Lévy, A., and Wyart, J., synthesis of orthoclase and albite by pneumatolysis using shattering explosives, I, 287. Synthesis of quartz by pneumatolysis, using shattering explosives; formation of liquid inclusions as mobile bubbles, I, 427. Synthesis of anorthite by pneumatolysis using shattering explosives, I, 435. Neogenesis of minerals by heating in gases and water vapour under high pressures; production of artificial metamorphic phenomena, I, 542.
See also Muraour, H.
- Michelazzi, L., oxygen uptake of bone marrow, III, 2.
- Micheletti, L. A., microchemical tests for Ag⁺, Hg⁺, Hg⁺⁺, Tl⁺, Pb⁺, and W, I, 217.
- Michell, J. H. See Grangaard, D. H.
- Michels, A., Bijl, A., and De Boer, J., effect of an excitation energy on the specific heat of liquid helium II and its relation to the exchange effect in a non-ideal Bose-Einstein gas, I, 602.
and Kleerekoper, L., measurements on the dielectric constant of carbon dioxide at 25°, 50°, and 100° up to 1700 atmospheres, I, 453.
and Nederbragt, G. W., isotherms of methane-ethane mixtures at 0°, 25°, and 50° up to 60 atmospheres, I, 463.
See also De Boer, J.
- Michels, M. W., sulphanilamide in treatment of gonococcal ophthalmia in children, III, 81.
and Gonno, W. S., meningitis due to *Staphylococcus aureus hemolyticus* treated with sulphanilamide, III, 1081.
- Michener, H. D., action of ethylene on plant growth, III, 1111.

- Michetti, G., and Bartolini, B., effect of 933 F. on human diuresis. I. Aqueous diuresis after ingestion of water. II. Solid diuresis after ingestion of water. III. Spontaneous diuresis, III, 614, 760.
- Bartolini, B., and Roncallo, E., vitamin-C in urine and administration of autotomotropic substances. III. Pro-stigmine, III, 392.
- Michi, K. See Ichiba, A.
- Michie, A. M. See Baird, D.
- Michiels, J. L., Parry, G., and Thomson, G. P., production of neutrons by the fission of uranium, I, 398.
- Michimoto, H. See Sueyoshi, Y.
- Michlin, D. M., and Borodina, O. J., inversion of the action of lactase, III, 423.
- Michnev, A. L., nitrogen metabolism in acute hepatitis, III, 271.
- Michnevitch, G. L., and Brovko, J. F., influence of surface phenomena on temperature curve of the nuclei number for a super-cooled organic liquid, I, 184.
- Michon, P., reaction time to vibratory stimuli, III, 571.
- See also Vêrain, M.
- Mickelsen, O., Waisman, H. A., and Elvehjem, C. A., distribution of vitamin-B₁ (thiamin) in meat and meat products, III, 1070.
- Mickelson, M. N., and Werkman, C. H., pressure-aeration effects on the assimilation of glucose by *Aerobacter indologenes*, III, 1100.
- Mickle, F. L. See Welch, H.
- Middendorf, L., new water-soluble suppository substance, III, 418.
- Middleton, A. See Williams, W. E.
- Middleton, A. R. See Aitkenhead, W. C.
- Mider, G. B., and Morton, J. J., effect of freezing *in vitro* on transplantable mammalian tumours and normal rat skin, III, 699. Skin tumours following single application of methylcholanthrene in C57 brown mice, III, 845.
- See also Lawrence, J. S.
- Mielnik-Kośmiderski, S., influence of bacterial polysaccharides and bacterial capsule on phagocytosis, III, 1106.
- Mierdel, G., extinguishing of the arc "hot-spot" at a mercury cathode, I, 503.
- Mies, H., alteration of resting potential of skeletal muscle during selective stimulation of autonomic nerve fibres, III, 471.
- Miescher, E., molecular spectra of halides of the iron group, particularly FeCl₃, I, 6. Molecular spectrum of thallos chloride, I, 596.
- Miescher, K., and Billeter, J. R., reductions with phosphorus in presence of iodine or hydrogen iodide as catalyst, II, 318.
- and Fischer, W. H., cisoid and transoid character of epimeric alcohols of the steroid series, II, 112. Isolation of a lactone-like compound from by-products of oxidation of cholesterol, II, 160. Partial reduction of androstenedione to testosterone, II, 165.
- Fischer, W. H., and Tschopp, E., action of enol esters of testosterone, II, 119.
- and Kagi, H., preparation of progesterone and neoprogesterone from dehydroandrosterone, II, 166.
- and Klarer, W., steroids. XXII. 17-Epimeric methylandrostenediols and methyltestosterone, II, 431.
- and Scholz, C., steroid alcohols with semicyclic double linking, II, 157.
- Miescher, K., and Tschopp, E., oral administration of male sex hormones, III, 53.
- and Wettstein, A., configuration of the adrenal hormones at C₁₇, II, 160. Steroids. XXIII. Homologues of the testicular hormone. I, II, 553.
- Wettstein, A., and Scholz, C., steroids. XXI. α -Unsaturated aldehydes of the pregnene series, II, 432.
- See also Kagi, H.
- Miesowicz, M. See Ornstein, L. S.
- Migdal, A., scattering of neutrons in ferromagnetics, I, 172.
- Migita, M. See Aso, K.
- Migliardi, C. See Mazza, F. P.
- Migliavacca, A., and Vegni, A. C., diagnostic exploration of endocrine dysfunction during pregnancy and gynaecological conditions, III, 381.
- Mignolet, F., blood changes due to benzene, III, 548.
- Mignon, H. See Paris, René.
- Mignon, W. See Lindner, J.
- Migone, L., and Sanguinetti, T., blood-catalase and insulin, III, 909.
- Migounow, D. B. I., resorption of amyloid substance in man, III, 695.
- Mihaeloff, S., colorimetric determination of blood-sugar, III, 12.
- Miholić, S., siliceous sinter from Vis Island (Lissa), Dalmatia, I, 346. Analysis of the Marijano spring at Gabernik, I, 540.
- Mijnlieć, C. J., and Waterman, L., artificial respiration and artificial circulation of the blood, III, 365.
- Mika, J., burettes suitable for electrometric microtitrations. I, I, 222.
- Mikami, G. See Okamoto, K.
- Mikelman, V. A. See Kissin, B. I.
- Mikluchin, G. P. See Wasserman, E. S.
- Mikola, O. J. See Shaklee, A. O.
- Mikriukov, S. M., haemodynamic changes in citrate shock, III, 364.
- See also Bogdanov, V. A.
- Mikschik, E. See Janke, A.
- Mikulicich, G., and Markees, S., ketones and experimental liver damage, III, 389.
- Milaknis, A., selective propagation of *Streptococcus agalactiae* and *Brucella*, III, 527.
- Milas, N. A., and Alderson, W. L., jun., synthesis of antirachitic vitamins. I. Synthesis of γ -2-methylenecyclohexylidene- Δ^4 -propene, II, 497.
- Harris, S. A., and Panagiotakos, P. C., organic peroxides. VI. Cyclane peroxides, II, 503.
- Postman, W. M., and Heggie, R., presence of vitamin-A and carotenoids in the olfactory area of the steer, III, 918.
- Sussman, S., and Mason, H. S., hydroxylation of unsaturated substances. V. Catalytic hydroxylation of unsaturated substances with functional groups, II, 404.
- and Walsh, W. L., catalytic oxidations. II. Oxidations in the cycloparaffin series II 205.
- Milatz, J. M. W., and Rottier, P. B., microbiological nephelometry, III, 434.
- and Rutgers, G. A. W., total and specific ionisation of Po α -particles and their statistical fluctuations, I, 396.
- See also Fürth, R., and Ornstein, L. S.
- Milazzo, G., ultra-violet absorption spectra of normal propyl and butyl iodides, I, 118. Ultra-violet absorption spectra of isopropyl and tertiary butyl iodides, I, 119.
- Milbauer, J., reactions in concentrated sulphuric acid. V. Influence of temperature on the catalyst. VI. Influence of the material to be oxidised on the catalyst series. VII. Kjeldahl catalysts. VIII. Equilibrium states with [Kjeldahl] catalysts. XII. Destruction of acetylene in the cold. XIII. Mannitol, a negative catalyst of reactions in concentrated sulphuric acid. XVI. Selenium and tellurium as catalysts, I, 33, 88, 206, 528, 571. Influence of desensitisers on the decomposition of acivicine by light, I, 574. Caramelisation of sucrose with sulphuric acid, II, 300.
- and Fritsch, L., reactions in concentrated sulphuric acid. XIV. Decomposition of acetylene, especially at higher temperatures, I, 327.
- and Milbauer, Z., reactions in concentrated sulphuric acid. XV. Relationships in the case of acetylene, II, 491.
- Milbauer, Z. See Milbauer, J.
- Miles, A. A., and Pirie, N. W., properties of antigenic preparations from *Brucella melitensis*. I. Chemical and physical properties of bacterial fractions. IV. Hydrolysis of the carbamido-linking. V. Hydrolysis and acetylation of the aminopolyhydroxy-compound derived from the antigen, III, 793, 1100.
- Miles, G. D. See Cassel, H. M.
- Miles, W. R., steady potential of human eye in subjects with unilateral enucleation, III, 972.
- Milgram, E. See Goldstein, B.
- Milhaelov, S., azine dyes derived from naphthalene, II, 88.
- Milhaud, P. See Randoin, L.
- Milhorat, A. T., and Wolff, H. G., diseases of muscle. II. Effect of varying amounts of ingested creatine on creatine tolerance in progressive muscular dystrophy. III. Metabolism of creatine and creatinine in myasthenia gravis: excretion of nucleosides and nucleotides, III, 127. Effect of ketosis and of ingestion of creatine in myotonia congenita, III, 463.
- See also Hardy, J. D.
- Milikan, R. A., mesotron as the name of the new particle, I, 174.
- Militzer, W. E. See Breuer, R.
- Miljutin, G. A. See Trapeznikov, O. N.
- Milla, E., effect of eserine on resistance to fatigue in man. I, III, 464. Effect of eserine on capacity of muscle for work. I, III, 464. Effect of eserine on muscular work, III, 663.
- Miller, W. M., and Park, J., morphine and chloroform in liver atrophy, III, 933.
- Miller, A. R., association of ions in a bi-univalent electrolyte, I, 370.
- See also Roberts, J. K.
- Miller, A. T., jun., haematocrit tube, III, 351.
- Miller, B. F., inhibition of experimental dental caries in the rat by fluoride and iodoacetic acid, III, 284.
- Allinson, M. J. C., and Baker, Z., metabolism of creatine and creatinine. I. Specific enzymic methods for analysis of creatine and creatinine in tissues, III, 988.
- and Muntz, J. A., micro-determination of lactic acid, III, 110.
- See also Alving, A. S., Baker, Z., Dubos, R. J., and Sendroy, J., jun.
- Miller, B. J. See Reimann, S. P.

- Miller, C. C., and Nicholson, J. R., rates of transformation in ethyl alcohol of ammonium and ethylammonium cyanates into the corresponding carbamides, I, 85.
- Miller, C. E., Raman spectrum of nitrogen, I, 58.
- Miller, C. O. See Hamre, C. J.
- Miller, C. P. See Boor, A. K., and Jones, Herbert W.
- Miller, D. K., and Rhoads, C. P., experimental production in dogs of acute stomatitis associated with leucopenia and a maturation defect of myeloid elements of bone marrow, III, 227.
- Miller, E., Rock, H. J., and Moore, M. L., substituted sulphanilamides. I. N^1 -Acyl derivatives, II, 308.
- Miller, E. De W., erythrocytes of the sloth, III, 227.
- Miller, E. J., and Robson, W., synthesis of α -methylamino- β -3-indolylpropionic acid, II, 36.
- Miller, E. M., and Fell, E. H., sulphanilamide therapy in actinomycosis, III, 610.
- Miller, E. S., and Johnson, I. J., relation between leaf tissue pigment concentration and yield in maize, III, 534. See also Barnes, R. H., Burr, G. O., Johnson, I. J., and Kass, J. P.
- Miller, E. W. See Pybus, F. C.
- Miller, F. R. See Heinle, R. W.
- Miller, H. A. See Burrell, R. C.
- Miller, H. C., Dick, P. G., and Stuart, C. W., clinical and electrocardiographic findings following the use of various local anæsthetic solutions, III, 314.
- Miller, H. E., chronic granuloma in industrial dermatology, III, 1093.
- Miller, H. G., and Crombie, D. M. R., dental caries, III, 1064.
- Miller, I., normal hematological standards in aged, III, 890.
- Miller, C. See McKenzie, F. F.
- Miller, J. D. See Meneses, T. O.
- Miller, J. J., jun., and Faber, H. K., immunisation against pertussis, III, 795.
- Miller, J. R. See Dellen, T. R. van.
- Miller, L., digestion of crystalline lactoglobulin by crystalline trypsin and chymotrypsin, III, 787.
- Miller, L. B., expression of p_H as an arithmetic quantity, I, 611.
- Miller, L. P., synthesis of β -(2-chloroethyl)- d -glucoside by potato tubers treated with ethylene chlorohydrin, III, 533.
- Miller, Maz, Johnston, S. M., and Hayman, J. M., jun., failure of ascorbic acid to influence albuminuria and hæmaturia in nephritis, III, 390. See also Hayman, J. M., jun., and Hayman, J. W.
- Miller, M. A., calculation of approximate particle sizes in stratified alumina hydrosols, I, 369.
- Miller, M. W., and Bearse, G. E., cannibalism-preventing properties of oats, III, 71. Cannibalism-preventing properties of oat hulls, III, 606. See also Bearse, G. E.
- Miller, N. See Emelëus, H. J.
- Miller, N. J., and Prickett, P. S., violet-red bile agar for detection of *Escherichia coli*, III, 428. See also Prickett, P. S.
- Miller, R. A., arrangement of axillary artery and brachial plexus, III, 737.
- Miller, R. J. See Olson, A. R.
- Miller, S. A. See Challenger, F.
- Miller, S. P., and Ruyper, A. C., relation of insulin and adrenaline to uric acid excretion in the rabbit, III, 296.
- Miller, W., relationship of structure to petroleum production in Eastern Venezuela, I, 588.
- Miller, W. R. See Doupe, J.
- Miller, W. T., Mingle, C. K., Murdock, F. M., and Heishman, J. O., concentration of sulphanilamide in blood and milk of cattle and its effect on *Brucella abortus* and streptococcal infections of the bovine udder, III, 944.
- Millet, L. A., étude expérimentale de la formation des voyelles, III, 254.
- Milletti, M., *in-vitro* growth in presence of tuberculin of leucocytes from tubercular patients, III, 114.
- Millikan, G. A. See Barcroft, J.
- Millikan, R. A., and Neher, H. V., new evidence for a change with time of the total energy brought into the earth by cosmic rays, I, 593.
- Neher, H. V., and Smith, D. O., seasonal cosmic-ray effects at sea level, I, 593.
- Milliken, G. See Phillips, J. R.
- Millman, S., determination of the signs of nuclear magnetic moments by the molecular beam method of magnetic resonance, I, 297.
- and Kusch, P., nuclear spin and magnetic moment of ^{27}Al , I, 545.
- Kusch, P., and Rabi, I. I., nuclear magnetic moment of ^{14}N , I, 56. Nuclear magnetic moments of the boron isotopes, I, 512. See also Kusch, P., and Rabi, I. I.
- Mills, C. A., Eskimo sexual functions, III, 262. Climate and metabolic stress, III, 781.
- Mills, E. S., thalassanæmia, III, 350.
- Mills, G. A., and Urey, H. C., oxygen exchange between carbon dioxide, hydrogen carbonate ion, carbonate ion, and water, I, 205. See also Urey, H. C.
- Mills, J., and Mawson, C. A., van den Bergh reaction in diagnosis of pernicious anæmia, III, 116.
- Mills, J. H., simple inexpensive pipetting machine, I, 539. Multiple ring maker for the Kline test, III, 338.
- and Jahn, E., history of syphilis in 180 patients in which the Kline tests, the Kolmer test, and the Kahn test are in disagreement, III, 430.
- Mills, W. H., and Dazeley, G. H., molecular dissymmetry due to restricted rotation in the benzene series; an optically active ethylenic derivative, II, 208.
- Milner, C. J., sulphide phosphors and zone theory of solids, I, 124.
- Milner, R. T. See Beckel, A. C.
- Milobędzki, T., and Borowski, W., absorption spectra of P^{III} derivatives. I. and II., I, 238, 508.
- and Lewandowski, M., absorption spectra of P^{III} derivatives. III., I, 508.
- Milone, H. S. See Sullivan, M. X., and Veitch, F. P., jun.
- Milone, M., Raman spectrum of trialkyl borates, I, 9.
- Milstead, K. L., [standardisation of] iodine and thiosulphate solutions, I, 577.
- Milsted, J. See Bawn, C. E. H.
- Milton, C., metamorphism of a granitic dyke at Franklin, New Jersey, I, 392.
- and Johnston, W. D., jun., sulphate minerals of the Comstock Lode, Nevada, I, 287.
- Milz, E. See Pfeiffer, P.
- Mimura, H., mechanism of travel of spermatozoon through the oviducts in the domestic fowl with special reference to the artificial insemination, III, 347.
- Minakawa, O. See Sugiura, Y.
- Minami, G. See Masugi, M.
- Minami, Y. See Iwatsuru, R.
- Minchilli, M. See Brüll, L.
- Minchin, L. T., luminescence of oxides under flame excitation, I, 122.
- Minder, W., neutron-proton ratio of natural radioactive elements and relationships in the disintegration series, I, 4. See also Liechti, A.
- Minea, I., action of lecithin in disseminated sclerosis, III, 1037.
- Mines Department, Safety in Mines Research Board, report, III, 736. Royal Commission report, III, 736.
- Minet, J., and Warembourg, H., tissue-chloride content in pathological lesions, III, 394.
- Mingle, C. K. See Miller, W. T.
- Minibeck, H., action of tyronormin in Graves' disease, III, 257.
- Minioni, L. See Adami, E.
- Minkowski, R. See Bowen, I. S., and Richardson, R. S.
- Minnhagen, L., relative intensities of the Stark effect components of the helium lines, I, 544.
- Minnibeck, H., action of piperazine on uric acid excretion, III, 185.
- Minnich, V. See Moore, C. V.
- Minnick, L. J., and Kilpatrick, M., acid-base equilibria in aqueous and non-aqueous solutions, I, 199.
- Minniti, G., activity of phosphoglyceric dehydrogenase in umbilical cord of human foetus at full term, III, 941.
- Minor, F. W. See Allison, F. E.
- Minot, A. S., comparison of effect of calcium and of atropine and scopolamine on the plasma loss and on the general symptoms of guanidine intoxication, III, 511. Study of mechanisms involved in the loss of plasma in guanidine intoxication and in the prevention of such a loss by atropine and by calcium, III, 511. Comparison of the actions of prostigmine and of guanidine on activity of choline-esterase in blood serum, III, 930.
- and Keller, M., modification of Greenberg technique for colorimetric determination of serum-protein, III, 232.
- Minozzi, M. T. See Galamini, A.
- Minton, J., industrial eye injuries, III, 38.
- Minuto, N. See Martini, V.
- Mintz, E. U. See Hecht, S.
- Mintz, M. See Geist, S. H.
- Minz, B. See Bonvallet, M.
- Miolati, A., and Semerano, G., reduction of aconitic acid at the dropping mercury cathode, II, 140.
- Mirev, D., system manganese sulphide-calcium oxide at medium and high temperatures, I, 371.
- Mirmanoff, A., determination of vitamin-C in urine in presence of arsenobenzene, III, 168. See also Mottu, F., and Raffy, A.
- Mirizzi, P. L., pathophysiology of dilation of bile ducts, III, 759.
- Mirlis, D. L., and Gluchova, A. I., kinetics of wetting and linear-selective corrosion of metals in polyphase systems, I, 205.
- Mironov, A. V. See Vernov, S. N.

- Mirsky, I. A., influence of insulin on protein metabolism of nephrectomised dogs, III, 477. Influence of anterior pituitary on protein metabolism, III, 906. Pancreatic hormones, III, 1050.
- Nelson, N., and Grayman, I., utilisation of acetone bodies. I. Effect of feeding and of glucose in nephrectomised female rats, III, 998.
- See also Nelson, N.
- Mirvish, I., tannic acid jolly for infantile stomatitis, III, 179.
- Misch, L., and Wyk, A. J. A. van der, structure of oxamide, I, 306.
- Mischtschenko, I. P., functional study of physiological connective tissue system (reticulo-endothelial system), III, 121.
- Misener, A. D. See Allen, J. F., and Appleyard, E. T. S.
- Miser, H. D., and Hewett, D. F., unweathered manganese deposits of the Batesville District, Arkansas, I, 344.
- Mishell, D. R., familial intersexuality, III, 60.
- Misra, R. D., edaphic factors in distribution of aquatic plants in English lakes, III, 210.
- Missbach, C., impregnation of the organism by dust. VII. Content of carbon dust in normal human lung, III, 316.
- See also Kahane, E.
- Missovskaja, M. See Shdanov, A.
- Missovski, L., and Shdanov, A., tracks on photographic plates of the recoil nuclei of disintegration of uranium, I, 444.
- See also Shdanov, A.
- Miszewski, B., influence of embryonic extract of various ages on growth and differentiation of cultures of bone and cartilage, III, 347. Effects of embryonic extracts on growth of cartilage and bone *in vitro*, III, 809.
- Mitchell, A., treatment of acute osteomyelitis by uleron, III, 306.
- Mitchell, A. C. G., and Varney, R. N., scattering of neutrons absorbed by iodine, I, 53.
- See also Langer, L. M.
- Mitchell, A. G., pineal gland, III, 683.
- See also Hewell, B. A., and Wilson, A. T.
- Mitchell, D. R., sulphanimide as a urinary antiseptic, III, 177.
- Greay, P. H., and Lucas, C. C., sulphanimide in treatment of cystitis and pyelitis, III, 857.
- See also Lucas, C. C.
- Mitchell, G. A. G., innervation of the ovary, uterine tube, testis, and epididymis, III, 56. Condition of peritoneal vaginal processes at birth, III, 1021.
- Mitchell, H. H., Stolz, H. R., Wade, A. E., and Warner, E. F., school health problems in relation to pediatrics, III, 619.
- See also Kinsman, G., Outhouse, J., Shields, J. B., and Steggerda, F. R.
- Mitchell, H. K., and Williams, Roger J., reduction with hydriodic acid; use in micro-determinations of hydroxyl groups, II, 43.
- See also Weinstock, H. H., jun., and Williams, Roger J.
- Mitchell, H. L., effect of varied solar radiation on growth, development, and nutrient content of white pine seedlings under nursery conditions, III, 1017.
- Mitchell, H. S., and Cook, G. M., effect of riboflavin and thiamin chloride on cataractogenic action of galactose, III, 286.
- Mitchell, J., jun. See Bryant, W. M. D., and Smith, D. M.
- Mitchell, J. S., origin of the erythema curve and the pharmacological action of ultra-violet radiation, III, 124.
- Mitchell, J. W. See Parton, H. N.
- Mitchell, N. B., characterisation and differentiation of the "intermediates" of the *coli-aerogenes* group of bacteria, III, 629.
- See also Vaughn, R.
- Mitchell, S., and Cameron, J., photolysis of β -chloro- β -nitrosobutane, I, 89.
- and Schwarzwald, K., rotatory dispersion and circular dichroism of santonide and parasantonide in the ultra-violet, I, 405.
- Mitchell, W. L. See Schlesinger, E. R.
- Mitchovitch, V. M., constitution of the quinaldine acids, II, 448.
- Mitolo, M., pace-maker of the heart of *Bufo vulgaris*, III, 18. Synthesis of vitamin-C in guinea-pig's tissues, III, 75. Cardio-sinus hormone of Haberlandt, III, 122.
- Mitra, B. N. See Linton, R. W.
- Mitra, D. D. See Wilson, H. E. C.
- Mitra, K., nutrition in Bihar. II. Local foodstuffs, III, 492.
- Mitra, S., Chakrabarty, N. K., and Mitra, S. K., thiophen derivatives from ethyl β -carbethoxylevulate, II, 442.
- Mitra, S. K., origin of the E layer of the ionosphere, I, 56.
- and Banerjee, A. K., fringe of the atmosphere and the ultra-violet light theory of aurora and magnetic disturbances, I, 441.
- See also Mitra, S.
- Mitsuba, K., Suehiro, S., and Itagaki, C., [kynurenin in] intestinal obstruction and auto-intoxication, III, 690.
- Mittal, D. S. See Pandya, K. C.
- Mittal, G. See Bhatnagar, S. S.
- Mittelman, B., juvenile adiposo-genital dystrophy, III, 46.
- Mittelstrass, H., drip transfusion, III, 551. Urinary porphyrin excretion in hyperemesis gravidarum and eclampsia, III, 687. Skin and fundus capillaries during short-wave therapy of eclampsia, III, 746.
- Mittenzwei, H. See Fischer, Hans.
- Mitter, P. C., and De, S., γ -ketonic acids. I. and II., II, 267, 377.
- Mittmann, A. See Suhrmann, R.
- Mittra, R. N., cupric hydroxide sol, I, 416. Periodic precipitation in absence of foreign gel. II. Ferric hydroxide sol [prepared] by different methods, I, 417.
- Mituda, H., vitamin-C. I. Content in various flowers and leaves. II. Variation of content in fruits. III. Ascorbic acid oxidase, III, 76, 168, 290.
- Mitui, S. See Shioiri, M.
- Mitui, T., sugar-cane wax. III. New constituents of unsaponifiable fraction. IV. Diol derivatives of sugar-cane sitosterol and stigmaterol. V. Oxidation of sugar-cane sitostanol acetate, I, 421; II, 504.
- Miura, K., quantitative separation of unsaturated fatty acids in fats and phosphatides, III, 1020.
- See also Sueyoshi, Y.
- Miura, M. See Kobayashi, Y.
- Miwa, M., and Yamashita, H., distribution in the organism of applied radium-D, -E, and -F and their histological action, III, 420.
- Miwa, M., Yamashita, H., and Mori, K., effect of X, γ , and β rays on unfertilised eggs and sperms [of sea urchins], III, 543.
- See also Yamashita, H.
- Miwa, S. See Kato, Kiyotoki.
- Mix, A. E., [examination of] waters, brine, and salt; fluorine in water, I, 577.
- Mixner, J. P. See Reece, R. P.
- Miyagawa, S. See Yukawa, H.
- Miyahara, S., ferromagnetism of semiconductors, I, 188.
- See also Kaya, S.
- Miyaji, T. See Choh, H.
- Miyakawa, C., relations between germicides and bacteria; germicidal action, III, 105.
- Miyake, Y., titration with adsorption indicator; argentometry of acidic solution of halide with metanil-yellow, and its mechanism of adsorption, I, 38. Western Pacific Ocean. I. and II. Composition of oceanic salt. III. F.p., osmotic pressure, b.p., and vapour pressure of sea-water. IV. Refractive index of sea-water, I, 233, 342, 540.
- Miyaki, H. See Ochiai, E.
- Miyamoto, G. See Sagane, R.
- Miyamoto, S. (Berlin). See Budó, A.
- Miyamoto, Sigeyuki, sarcoma production with thorotrast, III, 764.
- Miyamoto, Syōtarō, Balmer emission of the planetary nebula, I, 543. Hydrogen emission near the limit of the Balmer series in the solar chromosphere, I, 543.
- Miyasaka, M. See Kuwada, S.
- Miyasaka, R. See Shiba, H.
- Miyata, A. See Ishikawa, S.
- Miyazaki, S. See Sugihara, C.
- Miyazaki, T., smooth muscle of digestive and urogenital tracts in normal, pregnant, and puerperal rabbits, III, 223.
- Mizruchin, I. A., senility in Abchasian centenarians. VI. Neurological-psychiatric study, III, 393.
- Mizushima, S., Kubota, Tutomu, and Morino, Y., OH vibration spectrum in the photographic infra-red. II, I, 178.
- and Morino, Y., Raman spectra and molecular configurations of solid ethylene dihalides, I, 121.
- Morino, Y., and Okazaki, H., Raman effect and dipole moment in relation to free rotation. X. Molecular structure of *o*-chloroanisole, dimethoxybenzene, and diethoxybenzene, I, 9.
- Mizuta, N., acute pancreatic necrosis in Japan; medical aspect, III, 1058.
- Kubo, M., and Imai, Y., influence of hypothalamic piqure on pigment-excreting function of liver, III, 1059.
- and Nariyama, A., central regulation of pigment-excreting function of liver. I. Influence of piqure of medulla oblongata. II. Hypothalamus, III, 1059.
- Mizuta, T., excretion of bile and experimental liver tumours, III, 989.
- Mkrticheva, L. See Fedorov, N. T.
- Mladenovic, M., isolation of elemi resin acids, II, 436.
- Minik, I. R. See Godshello, M. G.
- Minkó, Z., effect of the thyrotropic and sex hormones on vitamin-A and -C contents of liver and adrenals of guinea-pigs, III, 73.

- Mobley, R. L., *Lactobacillus acidophilus* and *Saccharomyces cerevisiae*. I. Comparative value of media recommended for *L. acidophilus*. II. Simple medium for culturing *L. acidophilus*. III. Growth of *S. cerevisiae* in media recommended for *L. acidophilus*. IV. Effects of phenol on *L. acidophilus* in various liquid media, III, 523.
See also Owen, W. L.
- Mochan, I. See Gelbart, A.
- Mochel, J. M. See Scatchard, G.
- Mócsy, J. von, changes in and behaviour of myoglobulin after removal from muscle, III, 938.
- Modern, F., and Ruff, G., physical chemistry of proteolytic disintegration of anti-diphtheria serum, III, 103. Fractionation of serum-proteins during immunisation, III, 331. Proteolysis of anti-tetanus serum, III, 945.
- Modern, F. S. See Drake, M. E.
- Modrakowski, J., and Rusiecki, W., determination of activity of sedatives, III, 313.
- Moe, G. K., and Visscher, M. B., mechanism of failure in completely isolated mammalian heart, III, 744.
- Wood, E. H., and Visseher, M. B., aortic pressure and diastolic volume law of energy output in cardiac contraction, III, 905.
See also Barnes, R. H., and Beland, I. L.
- Moe, R. J., nutrition in pregnancy, III, 397.
- Möbus, H. See Heubner, W.
- Moehlig, R. C., and Allen, N. M., intersexuality, III, 912.
- Mohrer, See Güttich.
- Möller, C., and Rosenfeld, L., theory of mesons and nuclear forces, I, 237. Electric quadrupole moment of the deuteron and the field theory of nuclear forces, I, 595.
- Rosenfeld, L., and Rozental, S., connexion between the life-time of the meson and the β -decay of light elements, I, 595.
- Moller, H. F., growth-promoting system of lactic acid bacteria, III, 943.
and Ferdinand, R., *Bacterium acetylcholini*, I, III, 329.
- Zima, O., Jung, F., and Moll, T., biological comparison of synthetic and natural adermine, III, 704.
- Moller, H., thymol and thyroid action, III, 40. Action of thymol on thyroid gland, III, 909. Comparison of *p*-sulphanilamidoacetophenone and sulph-anilamide, III, 928.
- Moller, Hans. See Meldolesi, G., and Siedel, W.
- Moeller, K., solid solution series $\text{Ag}_3\text{Ga}-\text{AgZn}$ in ternary system silver-gallium-zinc, I, 251. Mixed crystal series in the ternary systems $\text{Ag}-\text{Mn}-\text{Zn}$ and $\text{Cu}-\text{Mn}-\text{Zn}$, I, 252. Two series of mixed crystals between Hume-Rothery compounds in the ternary system silver-copper-zinc, I, 314.
- Möller, M., halogen cyanides. II. Distribution of cyanogen bromide and iodide between benzene and water, and between benzene and aqueous salt solutions; synthesis and mol. wt. of cyanogen iodide, I, 518.
- Moller, O., and Widmark, E. M. P., action of fruit ingestion on blood content of dichromate-reducing substances, III, 13.
- Moeller, T., and Krauskopf, F. C., hydrous lanthanum hydroxide sols, I, 260.
- Möllerstrom, J., and Forssman, S., normal variations in water tolerance and diuresis, III, 487.
See also Sjögren, B.
- Moelwyn-Hughes, E. A., rate of reaction of methyl halides with halogen ions in methyl alcoholic solution, I, 150.
- Moen, J. K. See Farr, L. E.
- Mönch, G., thermo-electric potential of the element metal-semiconductor-metal. IV. Experimental and theoretical results for cuprous oxide, I, 132. Optical transparency of selenium in connexion with photo-electric conduction, I, 441.
- Morbel, W. See Albus, G.
- Moerke, G. A., enzyme of the tubercle bacillus, III, 624.
- Moerman, N. F., and Kraak, H. H., fluorescence model of uranyl salts, I, 180.
- Mörner, C. T., gall stones containing lithocholic acid from human beings; cases observed and published in Sweden, III, 692.
- Moers, H., experimental glomerulonephritis, III, 693.
and Schlienz, G., blood pressure determination in animals, III, 560.
- Moersch, F. S. See Heersema, P. H.
- Moerson, F. P. See Adson, A. W.
- Moeschl, H., para-sellar tumour with diabetes insipidus and thyrotoxicosis developing oliguria and myxoedema, III, 372. Rare types of hyperchromic anaemia, III, 547.
- Moetsch, J. C. See Raiziss, G. W.
- Moewus, F., carotenoids as sexual substances in algae, III, 437.
- Moffat, W. M., specific dynamic action test in castrated and menopausal women, III, 294.
- Moffett, R. B. See Shriner, R. L.
- Moffit, F. H., geology of the Slana-Tok district, Alaska, I, 343.
- Mofshin, R. See Clausen, H. J.
- Mogerman, W. D. See Scherrer, J. A.
- Moggridge, R. C. G. See Harington, C. R.
- Mogila, M. T., nervous centres of the electric organ of *Raja clavata*, III, 132.
- Mogila, J. L., variations in plasma-potassium produced by hemorrhage and blood transfusion, III, 892. Effect of adrenaline on potassium in plasma, III, 911.
- Mohler, F. L., caesium discharge under conditions of nearly complete ionisation, I, 112. Atomic absorption coefficients and transition probabilities [in caesium], I, 176. Luminous efficiency of ionised caesium vapour, I, 544.
- Mohler, H., and Sorge, J., ultra-violet absorption of polycyclic hydrocarbons, I, 178. Chemical warfare materials. XII. Light absorption of nose and throat irritants, lung poisons, and vesicants in the short-wave ultra-violet, I, 178.
See also Schwarzenbach, G.
- Mohler, (Miss) N. M., and Morrow, (Miss) P. L., fog in Wilson cloud chambers, I, 538.
- Mohler, W. M., complement fixation with chick-embryo antigen in equine encephalomyelitis, III, 632.
- Mohr, C. F., size of the red blood corpuscle in diabetes mellitus, III, 5.
- Mohr, H., vitamin-C requirements of man, III, 603.
- Mohr, W., and Kuhner, J. A., vitamin-C metabolism and reticulocytes in malaria, III, 289.
See also Lippelt, H., and Menk, W.
- Mohnheim, A. See Nowotny, H.
- Moir, T. See Gentzen, G.
- Moisset de Espanès, E., action of F. 933 on the enucleated eye of the frog, III, 83. Electrocardiographic changes produced by extract of *Gelsemium elegans*, III, 310. Effect of fixed or variable concentration of acetylcholine on the heart, III, 559.
See also Cahen, R., and Hazard, R.
- Moktader, A., and Guha-Sircar, S. S., bitter principle from *Andrographis paniculata*, Nees. I, II, 556.
- Moldavski, B. L., and Nisovkina, T. V., isomerisation of butanes and their equilibrium ratios, II, 529.
- Mole, J. D. C., and Turner, E. E., configuration of the tervalent nitrogen atom, II, 386.
- Moles, E., physicochemical revision of mol. and at. wts., I, 13.
and Salazar, M. T., mass of the normal litre and compressibility of gaseous carbon monoxide; at. wt. of carbon, I, 292.
- Toral, (Mlle.) M. T., and Escribano, A., limiting density and mol. wt. of ethylene; revised at. wt. of carbon, I, 52.
- Moleva, V. I. See Astaschenko, K. I.
- Molière, G., quantum-mechanical theory of X-ray interference in crystals. I. Derivation and general discussion of dynamical fundamental equations. II. Dynamic theory of refraction, reflexion, and absorption of Roentgen rays, I, 406. Theory of the solid state and the m.p., I, 515.
- Molière, K., influence of absorption on the refraction effect for electron beams. II. Addition to the Bethe theory of an expression for absorption, I, 245.
See also Thiessen, P. A.
- Molinski, S., Nowotny, F., and Calus, W., density and refractive index of aqueous furfuraldehyde solutions, I, 312.
- Molitch, M., treatment of acne vulgaris with testosterone propionate, III, 268.
- Molitor, H., and Robinson, H., determination of a weak local anesthetic action, III, 315. Pharmacological and toxicological properties of sulphanilamide and benzylsulphanilamide, III, 710. Toxicity of 2-sulphanilylamidopyridine and di-*p*-acetamidophenylsulphone, III, 927.
- Robinson, H., and Rahway, N. J., pharmacology of trichloroethanol, III, 314.
See also Latven, A. R.
- Moll, T., and Reid, A., potency of vitamin-A concentrates from fish-liver oils, III, 765.
See also Grab, W., Kuhn, R., Möller, E. F., and Werder, F. von.
- Moll, W. L. H., swelling and solubility of high-molecular substances, I, 76. Dielectric studies of the action of organic solvents on high-molecular substances. I.—III, I, 142.
- Molland, J., treatment of observations on a unimolecular reaction by the theory of errors, I, 376. Derivatives of 8-hydroxyquinoline in analytical chemistry, I, 625.

- Mollaret, P., electro-physiological study of postural regulation, III, 665.
- Lepine, P., and Kreis, B., leucocyte changes following experimental chorio-meningitis, III, 1026.
- and Sigwald, J., effect of thyroid on myxœdema with generalised muscular hypertrophy, III, 840.
- Mollendorf, W. von, Brown-Pearce tumour in tissue culture, III, 157.
- and Laqueur, G., effect of ultra-violet light on cultures of fibrocytes, III, 193.
- Molliard, M., formation of potato tubers in a sterile medium, III, 798.
- and Échevin, R., effect of nature of the food on food reserves, III, 436.
- Échevin, R., and Brunel, A., nitrogenous constituents of albinised leaves, III, 435.
- Mollier, S., development of periportal bile ducts and blood vessels in embryonic human liver, III, 956.
- Mollowna, M. See Achmatowicz, O.
- Molnar, W., determination of the sedimentation rate in oxalated blood, III, 116.
- Molo, C. See Antes, S.
- Molomut, N. See Culbertson, J. T.
- Moloney, P. J. See Smith, M. D.
- Molt, E. L. See Kluyver, A. J.
- Molteno, C. J., vitamin-A potency of South African fish-liver oils, III, 163.
- and Rapson, W. S., seasonal variations in vitamin-A content of visceral organs of the geelbek or Cape salmon (*Atrac-tion aequidens*, C and V), III, 918.
- Mommaerts, W. F. H. M., properties of the plastid-granum, III, 110.
- Momsen, H. See Kern, W.
- Monaghan, F. H. See Hughes, G. K.
- Monasterio, G., determination of blood-lipins, III, 452. Pathogenesis of renal glycosuria, III, 693.
- Monauni, F., sensations of hunger and satiety, III, 688.
- Monblanova, V. V., Kobosev, N. I., and Filippovitch, P. S., activation process and nature of active centres in catalysed electrolytic hydrogenation, I, 530.
- Moncorps, C., treatment of gonorrhœa with uleron and disepital, III, 410.
- Mondain-Monval, P., and Paris, René, thermal study of reactions in solution. I. Method; types of reactions, I, 150. and Quiquerez, J., liquid mixtures separated into two layers and critical opalescence, I, 516.
- Mondal, K. L. See Neogi, P.
- Mondon, H., and Pasquet, P., heart in muscular atrophy, III, 744.
- Money, R. W., and Davies, C. W., solubility of barium oxalate in aqueous salt solutions, I, 71.
- Monfort, F. See Gillet, A.
- Monguillon, P. See Lemoigne, M.
- Moniz de Bettencourt, J., Rodrigues Cardosa, M., and Paes de Vasconcellos, F., action of extracts of carotid body, III, 309.
- Monné, L., polychromatic vital staining of different gastropod cells with pyronine, III, 1. Fragmentation and alteration of form of nuclei, III, 2. Vital staining experiments on *Amœba proteus* and *dubia*, III, 112.
- Monnier, M., influence of motor, sensory, psychic, and vegetative mechanisms on spastic torticollis, III, 29. Bulbar centres for postural regulation of respiratory movements in the cat, III, 125.
- See also De Morsier, G.
- Monnier, P. See Loubatieres, A.
- Monroe, A. M., and Thaxton, H. M., phase shifts (K_1) for (A) the square well, (B) the error well, I, 595.
- Monroe, E. See Blicke, F. F.
- Monroy, A., primary localisation of genital cells in *Amura*, III, 146. Growth rate of optic cup and of crystalline lens in triton, III, 751.
- Monseise, G. G., copper thioaluminates, I, 27. Electrolytic production of very pure nickel from alloys, I, 479.
- See also Cambi, L.
- Montagne, M., and Garry, M., action of organo-magnesium compounds on di-acetyl- and benzil-dianil, II, 376.
- and Isambert, Y., action of magnesium ethyl bromide on butyretthylanilide, II, 150.
- Montalcini, R. L., and Visintini, F., chick embryo. I. Excitability and spontaneous movement at 4th—8th day of incubation. II. Effect of curare, strychnine, eserine, and acetylcholine on transmission of nervous impulses at 4th—8th day of incubation. III. Partial lesions of nerve centres at 4th—8th day of incubation. IV. First demonstrable nervous tract (neurofibrillar method) at period of first movement, III, 111.
- Montaldo, P. See Morando, G. C.
- Montefiore, See Dreyfus, B.
- Montel, (Mlle.) E., determination of mobilities of gaseous ions, I, 292.
- Montes, F. V., puncture of the spleen for diagnosis of aleukœmic lymphadenosis, III, 453. Agranulocytic angina, III, 812.
- Montesinos, A. F., *Datura arborea*, III, 1113.
- Montomerie, R. F., sulphanilamide in *Br. abortus* infection in animals, III, 81.
- Montgomery, C. G., and Montgomery, D. D., production of showers by cosmic rays, I, 5. Intensity of neutrons of thermal energy in the atmosphere at sea level, I, 504. Transition effect for large bursts of cosmic-ray ionisation and the number of primary electrons of very high energy, I, 594.
- Ramsey, W. E., Cowie, D. B., and Montgomery, D. D., slow mesons in the cosmic radiation, I, 594.
- Montgomery, D. D. See Montgomery, C. G.
- Montgomery, E. D., and Hudson, C. S., synthesis of *D*-mannoheptulose; preparation of some of its derivatives, II, 408.
- Montgomery, G. L., experimental acute [mercury] perchloride intoxication, III, 1089.
- See also Guthrie, K. J.
- Montgomery, H., xanthomatosis. III. Cutaneous xanthoma especially in relation to disease of the liver, III, 297. Precancerous dermatosis and epithelioma *in situ*, III, 1064.
- Holling, H. E., and Friedland, C. K., effect of iontophoresis with acetyl- β -methylcholine chloride on rate of peripheral blood flow, III, 183.
- Montgomery, M. L., influence of balloon distention of duodenojejunal loops on volume of combined digestive secretions, III, 270.
- Entenman, C., and Chaikoff, I. L., liver-lipins of dogs with ligation of the external pancreatic ducts, III, 692. Effect of external secretion of pancreas on blood-lipins of depancreatised dog maintained with insulin, III, 842.
- Monthéard, P. See Vavon, G.
- Monti, (Signa.) L., oxidising action of selenium dioxide; oxidation of acenaphthene, II, 18. Oxidising action of selenium dioxide, II, 183.
- Monticelli, M. See Ghiron, D.
- Montigel, C. See Reichstein, T.
- Montignie, E., insoluble tellurates, I, 333. Specific reagent for ceric salts, I, 387. Action of sulphides on very dilute solutions of permanganate, I, 483. Action of oxides on dilute solutions of potassium permanganate, I, 570. Sterols of fossils, III, 216.
- See also Halla, F.
- Montlaur, L., absorption and fluorescence spectra of pigments of St. John's wort (*Hypericum crispum*) from the Mediterranean basin, III, 439.
- Montoro, V., miscibility between iron and manganese oxides, I, 138.
- Moody, A. M. See Proescher, F.
- Moog, R., Garrigue, A., and Valdiguié, P., peroxidase action of traces of copper in presence of chlorides of sodium or magnesium, III, 624.
- Mooi, J. C., enzymes concerned in decomposition of alanine and aspartic acid by *Aspergillus niger*, III, 517.
- Mookerji, S. P. See Linton, R. W.
- Mookherji, A. See Krishnan, K. S.
- Moon, C. D. B. See Allport, N. L.
- Moon, F. E., quantitative extraction of carotene from grass, III, 734.
- Moon, H. D. See Ingle, D. J., and Reese, J. D.
- Moon, P. B. See Fertel, G. E. F.
- Moon, V. H., practical classification of leukœmic and related conditions, III, 349.
- and Morgan, D. R., shock: mechanism of death following intestinal obstruction, III, 148.
- Mooney, R. C. L., self-consistent field for doubly ionised chromium, I, 298. X-Ray determination of structure of tetramethylammonium dichloride crystals, NMe_4Cl_2 , I, 457.
- Moor, H. D., and Newport, N. M., effect of lymphocytes *in vitro* on bacterial toxins, III, 349.
- Moore, (Mlle.) See Louis, C.
- Moore, B. L. See Holloway, M. G.
- Moore, (Miss) C. E., arc spectrum of vanadium in the violet, I, 289.
- Moore, C. R., modification of sexual development in the opossum by sex hormones, III, 1053.
- Lamar, J. K., and Beck, N., cutaneous absorption of sex hormones, III, 53.
- and Price, D., effects of testosterone and testosterone propionate in the rat, III, 266.
- Moore, C. V., Arrowsmith, W. R., Welch, J., and Minnich, V., absorption of iron from the gastrointestinal tract, III, 936.
- Minnich, V., and Welch, J., normal fluctuations of serum and "easily split off" blood iron in individuals, III, 963.
- Moore, E. J., carbon and oxygen requirements of the cotton root-rot organism, *Phymatotrichum omnivorum*, in culture, III, 201.
- Moore, E. S., the Steeprock series, I, 110. Problems of the pre-Cambrian, I, 110.
- Moore, G. A., comportment of the palladium-hydrogen system toward alternating electric current, I, 316.

- Moore, G. E., and Parks, G. S., thermodynamic data for the cyclohexane-methylcyclopentane isomerisation, I, 567.
- Moore, J. E. See Padgett, P.
- Moore, L. A., effect of pasture on carotene content of blood plasma of cattle, III, 918. Determination of blood plasma-carotene in cattle using a photo-electric colorimeter, III, 918.
- Moore, L. V. See Coburn, A. F.
- Moore, M. See Alexander, L.
- Moore, M. L. See Fernholz, E., and Miller, E.
- Moore, M. R., Laughlen test for syphilis compared with Wassermann and Kahn tests, III, 795.
- Moore, M. T. See Bernstein, M.
- Moore, N. P. See Davis, L. D.
- Moore, R. A. See Dammin, G. J., Lord, J. W., jun., and Melchionna, R. H.
- Moore, R. M., and Dennis, J. R., of coronary venous blood and blood from other veins, III, 355. See also Dennis, J.
- Moore, T., spectroscopic changes in fatty acids. VI, III, 1066.
- Martin, A. J. P., and Rajagopal, K. R., physiological action of vitamin-E and consequences of -E deficiency. IV. Physiological action, III, 1074. See also Baumann, C. A., Cruikshank, E. M., Davies, A. W., Houston, J., and Maitra, M. K.
- Moore, W. H. See Brady, J. J.
- Moorhouse, W. W., titaniferous magnetites of the San Gabriel Mountains, Los Angeles Co., California, I, 226.
- Moos, G. E. See Huntress, E. H.
- Moose, C. A., chemical and spectroscopic analysis of phloem exudate and parenchyma sap from several species of plants, III, 216.
- Moraczewski, W. von, and Sadowski, T., distributions of ions between blood cells and plasma, III, 233.
- Morais, E. See Tavares, A.
- Morales, C. E. See Engel, P.
- Morales-Otero, P., and González, L. M., allergy in *Brucella* infections, III, 874.
- Moralev, A. K. See Sabinina, L. E.
- Morand, M. See Farineau, J.
- Morando, G. C., intestinal absorption of carbohydrates, III, 842. and Montaldo, P., intestinal absorption of fat in the goose, III, 484. See also Martini, V.
- Morató-Manaro, J., and Albrieux, A. S., effect of sex hormones on combs of castrated and normal cocks, III, 587.
- Morávek, V. See Fort, M.
- Morawietz, W. See Zintl, E.
- More, C. W., exposure of the body to unequal temperature, III, 419.
- Moreau, F., case of sternalis muscle, III, 888. See also Rigaud, and Rivoire, R.
- Morehouse, L. E., and Tuttle, W. W., electric pulse counter, III, 895.
- Morehouse, M. G., ketosis. XVI. Metabolism of α -, β -, and γ -deuterobutyric acids in the fasting rat, III, 926.
- Morel, A. See Courmont, P.
- Morel, F., distinctive anatomico-clinical form of chronic alcoholism: laminary cortical sclerosis of alcoholic origin, III, 671.
- Morel, J., Christin, M., and Gineste, P. J., reaction of thyroid chondriome to thyrotropic hormone, III, 906.
- Morel, J., and Gineste, P. J., effect of thyroid, thymus, and adrenal implants on thyroid of young rabbit, III, 754. See also Carrière, G.
- Morel, R. See Jahiel, R.
- Morell, T., biological vitamin-B₁ test, III, 287. Use of synthetic male sex hormone or of total gland extracts, III, 590. Nicotinamide, III, 994.
- Morelle, G. See Cornubert, R.
- Morelli, A., effect of copper on carbohydrate metabolism, III, 80. and D'Ambrosio, L., effect on blood-cholesterol of vitamin-B₁, ascorbic acid, and ascorbic acid during hepatic disease, III, 73. Ascorbic acid and liver-glycogen, III, 604. See also De Lucia, P.
- Morelli, E., serological specificity of avian tumours, III, 847. and Vercellone, A., [virus of] avian erythroblastosis, III, 879. See also Semproni, A.
- Morellini, M. See Besta, B.
- Morette, A., system iodine-vanadium; vanadium di-iodide and tri-iodide, I, 91.
- Morey, G. W., and Burlew, J. S., solubility in systems containing alkali and water. I. Introduction. II. Filter autoclave for solubility measurements at elevated temperatures and atmospheric pressure. III. Solubility of sodium hydroxide in a saturated sodium carbonate solution between 60° and 70°, I, 194. and Ingerson, E., system water-sodium disilicate, I, 200. See also Kracek, F. C.
- Morgan, A. F., Kimmel, L., and Davison, H. G., vitamin[-I and -D] content of Pacific fish oils, III, 702.
- Morgan, A. R. See Lewis, D. T.
- Morgan, B. G. E. See Coward, K. H.
- Morgan, C. T., vision. I. Technique for study of visual discrimination in rat, III, 1043.
- Morgan, D. R. See Cantarow, A., and Moon, V. H.
- Morgan, E. J., and Friedmann, E., S-cysteinosuccinic acid, II, 52. See also Hopkins, (Sir) F. G.
- Morgan, (Sir) G. T., and Davis, G. R., residual affinity and co-ordination. XL. Complex compounds of rhenium, I, 36. and Stewart, (Miss) Jessie, pyrido-(1:2:1:2)benzimidazoles and allied compounds (cyclic 1:3-diazalines). II, II, 391.
- Morgan, J., and Warren, B. E., X-ray analysis of structure of water, I, 12.
- Morgan, J. E. See Bernheim, F., and Nielsen, W. M.
- Morgan, J. L. See Blum, H. E.
- Morgan, J. W., mineral oil as laxative, III, 311.
- Morgan, K. Z. See Nielsen, W. M.
- Morgan, L. O., and Vonderahe, A. R., hypothalamic nuclei in heat stroke, III, 829.
- Morgan, M. N. See Loofbourow, J. R.
- Morgan, M. T., control and regulation of sale of vitamin-active products in Great Britain, III, 284.
- Morgan, P. S. See Gilliland, E. R.
- Morgan, S. O. See Holden, A. N.
- Morgan, T. H., and Tyler, A., relation between entrance point of spermatozoon and bilaterality of egg of *Chaetopterus*, III, 346.
- Morgan, T. N. See Campbell, D.
- Morgan, W. A. See Hall, E. M.
- Morgan, W. C., straightening thin tungsten wires, I, 583.
- Morgan, W. T. J., and Reichstein, T., 6-deoxy-d-arabascorbic acid [d-erythro-3-keto-6-methylpentonolactone], II, 6.
- Morgan, W. W., interpretation of molecular spectra and study of molecular spectra in celestial objects. IX. Molecular bands as indicators of stellar temperatures and luminosities, I, 354.
- Morgareidge, K., and O'Brien, B., anomalies in the bio-assay of vitamin-D milk, III, 169.
- Morgensen, K. R. See Linderstrøm-Lang, K.
- Morgenstern, H., growth on alkali halide crystals, I, 308.
- Morgenstern, V. See Eger, W.
- Morguleff, (Mlle.) N., cyanogen in stars of less advanced types, I, 57. Absorption of sulphur vapour in the visible [spectrum], I, 166. See also Barbier, D.
- Morgulis, N. D., and Diatlovitskaja, B. I., ionisation of sodium atoms at the surface of thoriated tungsten, I, 348. and Gabovitch, M. D., processes at discharge ignition in the gasotron, I, 228. and Nagorski, A., secondary electron emission from oxide-coated cathodes, I, 291.
- Morgulis, S., nutritional muscular dystrophy—a multiple vitamin-deficiency disease, III, 493. Wilder, V. M., and Eppstein, S. H., dietary factors associated with nutritional muscle dystrophy, III, 78.
- Mori, F. See Ogata, A.
- Mori, H., glycinebenzoacylase, III, 722.
- Mori, K. See Miwa, M., Nakahara, W., Okinaka, S., and Yamashita, H.
- Mori, Tanenao, fate of Δ^3 -12-ketocholenic acid in the rabbit; synthesis of dehydronorcholadiene, II, 218. Formation of 7-hydroxy-3:12-diketocholenic acid from dehydrocholic acid by *B. proteus*, III, 630.
- Mori, Tosio, peptone derivatives of gelatin. I. Effect of various enzymes on the peptones (albumose, peptone, and tryptone). II. Fractionation of the ereptic hydrolysate of gelatin-peptone and -tryptone. III. Fractionation of gelatin-peptone and -tryptone. IV. Anaphylactic shock with reference to the free amino-groups. V. Anaphylactic shock with reference to substituted amino-acids and hydrolysable guanidine residues, II, 132; III, 198, 713, 780. Acylase action. V. Fission of furfuracrylylglycine, III, 197.
- Mori, Y. See Endo, M.
- Moricard, R., hormone dosage in artificial stimulation of human genital apparatus, III, 1052. and Cauchoix, J., production of fibroma in female guinea-pigs following oestradiol benzoate injection, III, 263. and Gothie, S., anomalous maturation division in hypophysectomised rat, III, 972. and Saulnier, F., comparative study of stilboestrol and oestradiol benzoate in human therapeutics, III, 1053. and Tsatsaris, B., microcinematography of intracellular contents, III, 344. See also Gothié, S.
- Moricz, M. See Müller, Alexander.
- Morigami, S., methyleholanthrene-sarcoma cultured *in vitro*, III, 491.

- Morii, S., vitamin-P, III, 996.
- Morikawa, H., influence of testis and prolactin on growth of transplanted rat sarcoma, III, 990. Influence of thymus on rate of growth of transplanted sarcoma and influence of sex glands on this action, III, 990.
- Morikawa, Katuzi. See Okinaka, S.
- Morikawa, Kiyoshi, reactivity of lower hydrocarbons. I. Preparations and infra-red spectra of methanes and ethanes. II. Extinction coefficients of deuteromethanes and deuterethane and their mode of analysis. III. Activation on catalytic surfaces in methane. IV. Activation on catalytic surfaces in ethane. V. Activation on catalytic surfaces in propane. VI. Activation on catalytic surfaces in ethylene. VIII. Mercury-sensitized reactions of methane, deuteromethanes, and the isotopes of hydrogen (exchange reaction). IX. Mercury-sensitized reactions of methane, deuteromethanes, and the isotopes of hydrogen (condensation reaction). X. XI. Reactions between atomic deuterium and saturated aliphatic hydrocarbons, I, 59, 422, 425.
- Morikawa, N., morphology of liver. II. Shape of the liver of 110 Japanese embryos. III. Shape of the liver of 35 pairs of Japanese twin embryos, III, 806. Topography of stomach and liver of Japanese twin embryos, III, 1022.
- Morimoto, M. See Shinano, S.
- Morin, C. See Langlois, J.
- Morin, G., mechanism of escape of isolated intestine from inhibitory action of adrenaline, III, 581. Effect of 933 F. on action of adrenaline on isolated rabbit intestine, III, 978.
- and Guiran, J. B., spinal control of micturition, III, 246.
- See also Hermann, H.
- Morino, Y. See Mizushima, S.
- Morioka, K., action of prolactin on nitrogen metabolism, III, 474.
- Morisita, T., transmission experiments on relapsing fever with tropical rat-mite, *Liponyssus* sp., III, 526.
- Morison, B. R. See Forbes, A.
- Morison, R. S., and Lissak, K., action of piperidinomethylbenzodioxan (933 F.), III, 504.
- Morita, I. See Ogata, D.
- Morita, N., Tanaka, Haruo, and Titani, T., catalytic exchange of gaseous oxygen isotopes. IV. Exchange between oxygen atoms and water vapour on the surface of oxides of calcium, titanium, vanadium, chromium, manganese, iron, and nickel, I, 207.
- and Titani, T., catalytic exchange of gaseous oxygen isotopes. III. Exchange reactions of oxygen atoms between oxygen and water vapour at the surface of copper oxide, I, 87.
- Moritz, C. E., modification of Lebowich's soap-wax technic, III, 545.
- Moritz, H. See Sieverts, A.
- Moritz, W., function and innervation of muscles of soft palate, III, 641.
- Moriyama, I. M., thermopile for low-temperature radiation measurements, I, 388.
- and Herrington, L. P., relation of diseases of the cardiovascular and renal systems to climatic and socio-economic factors, III, 192.
- See also Herrington, L. P.
- Morizami, S., pure culture of hepatic cancer produced by dimethylaminoazobenzene, III, 990.
- Morland, A., and Osborne, pericarditis associated with R-T deviation, III, 122.
- Morlock, C. G., arterioles in hypertension, III, 365.
- Mornet, J., and De L'Écluse, G., cerebrospinal meningitis cured by carboxysulphamidochrysoidine, III, 82.
- Morneweg, W. See Abderhalden, E.
- Morosov, I. I., inhibition and restoration of the regenerative processes in an axolotl extremity, III, 112.
- Morozov, N. M., and Kagan, M. J., sorption properties of mixed catalysts. II. Desorption of ammonia by the poisoning of ammonia-catalysts with oxygen-containing gases, I, 33.
- Morrell, J. A. See Leatham, J. H.
- Morris, B. S. See Mellor, D. P.
- Morris, C. T. See Morris, D. L.
- Morris, D. L., and Morris, C. T., specific effects of tissue extracts on the crystallization pattern of cupric chloride, I, 379. Glycogen in seeds of *Zea mays* (golden bantam), III, 1112.
- Morris, H. J., and Wallace, E. W., storage of arsenic in rats fed a diet containing calcium arsenate and arsenic trioxide, III, 413.
- See also Calvery, H. O., Grant, R. L., Laug, E. P., and Morris, H. P.
- Morris, H. P., Laug, E. P., Morris, H. J., and Grant, R. L., growth and reproduction of rats fed diets containing lead acetate and arsenic trioxide and the lead and arsenic content of newborn and suckling rats, III, 413.
- See also Laug, E. P.
- Morris, J. C., and Pease, R. N., thermal hydrogen-chlorine reaction. I. Experimental kinetics. II. Relation to the theory of chain reactions, I, 203.
- Morris, K. B., balancing of oxidation-reduction equations, I, 95.
- Morris, M. L., and Murray, T. J., successful treatment of meningoencephalitis, associated with canine distemper, with sulphanilamide, III, 774.
- See also Green, D. F.
- Morris, R. C. See Adams, R.
- Morris, S., dairy science. A. Physiology of dairy cattle. II. Nutrition, III, 492.
- and Ray, S. C., fasting metabolism of ruminants, III, 924. Effect of phosphorus deficiency on protein and mineral metabolism of sheep, III, 924.
- Morris, W. See Seyer, W. F.
- Morrison, A. L. See Haworth, E.
- Morrison, A. P., Shaw, D. R., Kenney, A. S., and Stokes, J., complement-fixation studies on sera of individuals vaccinated with active virus of human influenza, III, 633.
- Morrison, J. See Prescott, C. H., jun.
- Morrison, J. L., Shay, H., Ravdin, I. S., and Cahoon, R., absorption of glucose from stomach of dog, III, 1058.
- Morrison, J. O. See Harned, H. S.
- Morrison, M., and Samwick, A. A., aspiration of bone marrow, III, 645.
- Morrison, P. See Dancoff, S. M.
- Morrow, G., Syverton, J. T., Stiles, W. W., and Berry, G. P., growth of *Leptospira ictero-haemorrhagiae* on the chorio-allantoic membrane of the chick embryo, III, 103.
- Morrow, (Miss) P. L. See Mohler, (Miss) N. M.
- Morse, F. W., jun. See Weisberger, D.
- Morse, J. F. See Clayton, W.
- Morse, M. See Schlutz, F. W.
- Morse, R. S., electrolytic development of the latent image, I, 530.
- Morsita, T., trichomonad, parasitic in the reproductive organs of cattle. I. Nomenclature and morphology. II. Biological characters. III. Serological study, with special reference to agglomeration and agglutination phenomena. IV. Vital staining. V. Oxidation and reduction ability, III, 628.
- Mortenson, C. W. See Spielman, M. A.
- Mortimer, C. H. See Jenkin, B. M.
- Mortimer, H., Wright, R. P., Thomson, D. L., and Collip, J. B., intra-nasal administration of oestrogenic hormones in constitutional deafness, III, 584.
- See also Burr, E. G.
- Morton, A. A., flask for efficient stirring, I, 283.
- and McKenney, L. F., triarylcannabinols. VIII. Occurrence of colour with tri-phenylcarbonium salts, III, 546.
- Mahoney, J. F., and Richardson, G., vacuum sublimation and molecular distillation apparatus, I, 582.
- and Wood, W. H., triarylcannabinols. VII. Diphenyl-4'-dimethylaminodiphenylcarbonol and its relation to the theory of colour of dyes, II, 546.
- Morton, A. V., Branch, C. F., and Clapp, D. B., production of cancer by hydrocarbons other than those of the phenanthrene type, III, 159.
- Morton, F. See Kenner, J.
- Morton, F. L. See Spielman, F.
- Morton, G. A. See Ramberg, E. G.
- Morton, H. E., bacterial filters and filtration techniques, III, 338. Preservation of bacterial cultures. II. Summary of methods, III, 338. Survival of microorganisms in fixed and stained preparations, III, 633.
- Morton, H. G., atropine intoxication, III, 935.
- Morton, J. J. See Mider, G. B.
- Morton, J. W. See Weigert, F.
- Morton, M. See Hartmann, A. F.
- Morton, R. A., and Creed, R. H., conversion of carotene into vitamin-A by fresh-water fish, III, 399.
- and Stubbs, A. L., absorption spectra of sulphur compounds, I, 507.
- See also Earlam, W. T., and Lovern, J. A.
- Moruzzi, Giovanni, sugar, phosphorus, and creatine changes in dog's blood after exercise, III, 12. Changes in iodide content of thyroid gland and basal metabolism of mammals due to treatment with bromine [compounds], III, 170. [Action of] bromine [on thyroid], III, 908. Bromine in tissues after administration of bromide, III, 1004. Thyroid-bromine and -iodine after administration of bromide, III, 1048.
- and Borgatti, G., effect of bromine on growth of the organism, III, 398. Effect of bromine on growing animals, III, 866.
- Moruzzi, Giuseppe, and Bartoli, M. A., significance of aerobic glycolysis, III, 625.

- Moruzzi, *Giuseppe*, oscillographic demonstration of synergism of cortical mastatory centres, III, 30. Cortical facilitation and chemical mediation, III, 32. Effect of insulin hypoglycæmia on electric activity of cerebral cortex, III, 34. Effect of sodium fluoride and methylene-blue on electric activity of the cerebral cortex, III, 469. Electrical activity of cerebral cortex in insulin hypoglycæmia and in different conditions modifying the metabolism of the centres, III, 672.
See also Adrian, *E. D.*, and Moruzzi, *Giovanni*.
- Moschinski, *G.*, sodium chloride deficiency and tetany, III, 41.
- Moschkewitsch, *L. S.*, pathogenesis of hæmolytic shock, III, 353.
- Moschkov, *B. S.*, symbiosis of leguminous plants with nitrogen-assimilating bacteria determined by photo-periodism, III, 635. Relationship between photo-periodism and drought-resistance of perennial plants, III, 636.
- Moschkovski, *S. D.*, immunity in infectious diseases; (law of re-inoculation), III, 634.
- Moschtschinskaja, *N. K.*, preparation of dibenzpvronequinone. I. Reaction of benzanthrone with benzoyl chloride, II, 555.
See also Silin, *N. F.*
- Mosebachi, *R.* See Ahlfeld, *F.*
- Mosenthal, *H. O.*, clinical aspects of hypertension including malignant hypertension, III, 239.
- Moser, *C. E.* See Gucker, *F. T., jun.*
- Moser, *Helmuth*, and Zmaczynski, *A.*, saturation pressure of water vapour between 73° and 130°, I, 311.
- Moser, *W.* See Schopfer, *W. H.*
- Mosettig, *E.*, and Krueger, *J. W.*, phenanthrene series. XIX. Naphthoquinolines synthesised from aminophenanthrenes, II, 86.
and May, *(Miss) E. L.*, phenanthrene series. XXII. Derivatives of dibenzisoquinoline and naphthisoquinoline, II, 343.
and Stuart, *A. H.*, phenanthrene series. XXIII. Synthesis of acyl compounds derived from 2-hydroxy-9:10-dihydrophenanthrene, II, 115.
See also Krueger, *J. W.*, and Robinson, *Richard A.*
- Mosher, *L. M.* See Harris, *R. S.*
- Mosimann, *H.* See Sadron, *C.*
- Mosinger, *M.*, and Bonifaci, *P.*, gastric ulcers produced by nicotine injections, III, 914. Changes in peripheral sympathetic system follow chronic nicotine treatment, III, 1091. Effect of chronic injections of nicotine on ductless glands, III, 1002.
- Bonifaci, *P.*, Bontoux, *Y.*, and Veyron, *J.*, changes in blood-sugar during chronic nicotine treatment in guinea-pig, III, 866. Mechanism of nicotine hyperglycæmia, III, 1002.
- Moskowitz, *S. M.*, photochemistry of heavy-metal azides. I. Structure and properties of gelatin suspensions of heavy-metal azides, I, 425.
- Moskowitz, *E.*, influence of vegetable nutrients on the blood-sugar of diabetics, III, 997.
- Mosonyi, *L.*, action of insulin and glucose in arsenic poisoning, III, 380.
and Sellei, *C.*, hæmatological findings in cases of acute poisoning, III, 5.
- Moss, *F. K.* See Luckiesh, *M.*
- Moss, *J. M.* See Jones, *F. G.*
- Moss, *R. L.*, and Wolfenden, *J. H.*, thermochemistry of solutions. IV. Heat of solution of sodium chloride in methanol-water mixtures, I, 147.
- Mossini, *A.*, 1:3-dimethylxanthine-papaverine, II, 395. (Estrogenic activity of carob-gorm oil, III, 588.
- Mossman, *H. W.*, homology of the vesicular ovarian follicles of the mammalian ovary with the coelom, III, 55.
and Weisfeldt, *L. A.*, foetal membranes of the thirteen-striped ground squirrel, III, 738.
See also Barnstein, *N. J.*
- Mostafavi, *K.* See Colonge, *J.*
- Moszew, *J.* See Dziewoński, *K.*
- Moteki, *S.*, parasymphathetic "trophic" fibres in the trigeminal nerve, III, 471.
- Motida, *N.*, and Adati, *T.*, intensity of X-irradiation and life cycle of cells, III, 784.
See also Nishikawa, *S.*
- Motokawa, *K.*, unidirectional properties of frog skin in conductivity, polarisation, and permeability. I. Differential conductivity as a secondary phenomenon. II. Ionic permeability and polarisation in relation to membrane charge, III, 67.
- Motschalov, *K. N.*, synthesis of nitric oxide in a torch discharge. II, I, 152.
- Mott, *F.* See Rheinboldt, *H.*
- Mott, *N. F.*, contact between a metal and an insulator or semi-conductor, I, 181. Theory of crystal rectifiers, I, 356. Copper-cuprous oxide photo-cells, I, 452. Decomposition of metallic azides, I, 571. Formation of protective oxide films on metals, I, 574.
and Gurney, *R. W.*, theory of liquids, I, 183.
See also Fröhlich, *H.*, and Gurney, *R. W.*
- Mott-Smith, *H. M.*, periodic deviation from the Schottky line, I, 589.
- Motta, *G.*, electrocardiogram in rapid asphyxia by strangulation, III, 122. Electrocardiogram in experimental sunstroke, III, 419. Electrocardiographic study of asphyxia, III, 455.
- Motta, *R.*, effect of castration on the cock's voice, III, 590.
- Mottram, *J. C.*, photodynamic activity of the urine of mice treated with blastogenic hydrocarbons, III, 492.
See also Gray, *L. H.*, and Palmer, *N.*
- Mottram, *V. H.* See Lindsay, *J.*
- Mottu, *F.*, and Mirimanoff, *A.*, dyeing of intravacuolar lipins; use of rhodamine-B, III, 1113.
- Motwani, *D. C.* See Hutchins, *W. A.*
- Motz, *L.*, and Feenberg, *E.*, spacing of energy levels in light nuclei, I, 117.
- Motzkin, *T.*, form and extent of region of indistinct vision in quick forward motion, III, 904.
- Motzkus, *E.* See Rheinboldt, *H.*
- Moubacher, *R.* See Schönberg, *A.*
- Moukerjee, *A.* See Spath, *E.*
- Mountain, *E. D.*, sapphire crystals from Blinkwater, Transvaal, I, 285.
- Mountford, *M.* See Rabinowitch, *I. M.*
- Moureaux, *P.*, and Lambert, *J.*, presence of isoagglutinin anti-M in human blood, III, 961.
- Moureu, *H.*, De Ficquelmont, *A. M.*, Magat, *M.*, and Wetroff, *G.*, structure of phosphorus pentachloride in relation to steric obstruction of atoms, I, 406.
- Moureu, *H.*, Dodé, *M.*, and Dodé, *(Mme.)*, preparation of glycols from ethylene hydrocarbons, II, 96.
- Magat, *M.*, and Wetroff, *G.*, Raman effect and the structure of compounds AX₃; phosphorus pentachloride and its homologues, I, 121.
- Rosen, *B.*, and Wetroff, *G.*, equilibrium between phosphorus paranitride, (PN)₂, and diatomic PN molecules, deduced from the band spectrum, I, 508.
and Wetroff, *G.*, formation and polymerisation of the phosphonitrile radical, PN, I, 91.
- Mourgue, *M.*, changes in composition of membrane bone following fracture of a long bone, III, 887.
See also Roche, *J.*
- Mouriquand, *G.*, biological and clinical aspects of vitamin-C and avitaminosis-C, III, 603. Resistance to avitaminosis, III, 768.
- Cœur, *A.*, and Viennois, *P.*, synthesis of ascorbic acid by young organisms, III, 994.
- Edel, *V.*, and Dauvergne, *M.*, avitaminosis-C, III, 704.
- Edel, *V.*, Dauvergne, *M.*, and Lavaud, *J.*, acute asymptomatic avitaminosis-C, III, 290.
- Moussa, *A.* See Bulliard, *H.*, and Thibaud, *J.*
- Moussatché, *H.*, and Vianna Dias, *M.*, convulsions produced in Brazilian frogs, III, 370. Convulsions produced by chemical stimulation of the spinal cord in *Leptodactylus ocellatus*, III, 370. Production of epilepsy in monkey, III, 971.
See also Ozorio de Almeida, *M.*
- Mousseron, *M.*, and Granger, *R.*, optically active stereoisomeric alicyclic acids, alcohols, and aldehydes, II, 319.
- Granger, *R.*, and Ronayroux, *M.*, composition of essence and heated oil of *Juniperus oxycedrus*, L., II, 381.
- Moutte, *M.* See Roche, *J.*
- Mouzon, *J. C.*, and Park, *R. D.*, delayed γ-rays from uranium activated by neutrons, I, 504.
- Park, *R. D.*, and Richards, *J. A., jun.*, γ-rays from uranium activated by neutrons, I, 294.
- Mowat, *J. H.*, and Little, *C. C.*, effect of choline chloride on oestrous cycle of mice, III, 383.
- Moxon, *A. L.*, Olson, *O. E.*, Searight, *W. V.*, and Sandals, *K. M.*, stratigraphic distribution of selenium in the cretaceous formations of S. Dakota: selenium content of associated vegetation, III, 1108.
and Poley, *W. E.*, tolerance levels of seleniferous grains in laying rations [for hens], III, 600. Relation of selenium content of grains in the ration to the selenium content of poultry carcass and eggs, III, 600.
- Moyer, *A. J.*, May, *O. E.*, and Herrick, *H. T.*, production of gluconic acid by *Penicillium chrysogenum*, III, 327.
- Moyer, *L. S.* See Abramson, *H. A.*
- Mozingo, *R.* See Marvel, *C. S.*
- Mrozowski, *S.*, polarisation of band fluorescence of metal vapours, I, 50. Structure of the Be I line λ 4573 Å., I, 289. Isotope displacement in the boron spectrum, I, 289.
- Mu, *J. W.*, increased susceptibility of rabbits to Brown-Pearce epithelioma induced by oestrogens in human pregnancy urine, III, 490.

- Muck, O., circulation in the human skull in different postures, III, 458. Action of amyl nitrite on nystagmus, III, 571.
- Mucke, K. See Hinsberg, K.
- Mudbhalkar, K. D. See Hutchins, W. A.
- Mudd, S. See Wells, W. F.
- Mudrow, L. See Kikuth, W.
- Muffling, L. von, and Maess, R., homogeneous decomposition reactions of simple organic compounds, I, 85.
- See also Jost, W.
- Mühlbock, O., reduction of the capon comb after administration of oestrogenic hormone, III, 145. Difference of effect between oestrogenic hormones and diethylstilboestrol, III, 479. Free and combined oestrogens in the blood during pregnancy, III, 585.
- Müller, See Klein, Wilhelm.
- Müller, Adolf [with Binzer, I.], cerebronic and nervonic acid, II, 200.
- Müller, Alex, and Schallamach, A., crystal structure of methane at the transition point, 20° K., I, 245.
- Müller, Alexander, Möricz, M., and Verner, G., Walden inversion in the sugar group. II. Alkali-stability of the sulphonyl group in sulphonates of sugar derivatives, II, 245.
- Müller, Arno, preparation and properties of pure ionone, II, 78. Terpenochromogenic or terpenochromic compounds. II. Spectroscopic examination of the pigments formed in the EM reaction with essential oils, II, 329. Nature of paragenoses, III, 36. Chemistry of the urine in jaundice. III. Green colour reaction with *p*-dimethylaminobenzaldehyde, III, 153. Chemical study of icteric urines, III, 596.
- Müller, A. H., influence of ascorbic acid on the leucocytes, III, 114.
- Mueller, A. J., apparatus for milking small laboratory animals, III, 344.
- Müller, D., glycuronate and gluconate as hydrogen donors for yeast, III, 199.
- Mueller, D. W. See Lampson, C. W.
- Müller, Erich. See Heeren, J. G.
- Müller, Erich (Dresden), reaction of copper and zinc with aqueous chromic acid; (ionic, surface, and space film), I, 256. Magnetism and organic chemistry, I, 511.
- Müller, Ernst, and Stoetzer, W., behaviour of derivatives of azidoacetic ester towards potassium ethoxide, II, 250.
- Müller, Eugen, and Janke, W., magnetochemical investigation of organic compounds. XVI. Constitution and magnetic behaviour of metallic ketyls, I, 361.
- and Topel, T., reactivity of organolithium compounds, II, 191.
- and Wiesemann, W., magnetochemical investigation of organic compounds. XV. Constitution and magnetic behaviour of metallic ketyls, II, 83.
- Müller, E. W., combined prontosil-pyramidon treatment, III, 710.
- Müller, Friedrich, and Buchwald, H., influence of succinic acid on diabetic ketosis, III, 174.
- See also Krainick, H. G.
- Müller, Fritz, oxycellulose. I and II, II, 100.
- Müller, F. H., tobacco and carcinoma of lung, III, 848.
- Müller, F. H. (Berlin), rectifier action, I, 9. Interaction of conductivity electrons and distortion centres in electronic semiconductors; potential and frequency effects, I, 60.
- Müller, Gerhard. See Brederick, H.
- Müller, Geza. See Ruzicka, L.
- Müller, H. (Zurich). See Reichstein, T.
- Müller, Hans, use of new disinfectants, III, 504.
- Mueller, Hans (Cambridge, Mass.), light-scattering in anisotropic media, I, 120. Electro-optical effects in colloids, I, 257. Electro-optical effects in bentonite colloids, I, 318.
- and Sakmann, B. W., new electro-optical effect, I, 598.
- Müller, H. A., Glaser-Haempel fish test, III, 482. Glaser-Haempel fish test for detection of male sex hormone and corpus luteum hormone, III, 1056.
- See also Friedrich-Freksa, H.
- Müller, H. C. D., use of scopalamine-eucodal-ephedrine in casualty surgery, III, 615.
- Müller, H. D., action of uleron in subacute and chronic female gonorrhoea, III, 178. Action of prontosil in obstetrical infections, III, 773.
- Müller, H. F. See Freudenberg, K.
- Müller, H. K., absorption of glucose and ascorbic acid by the lens, III, 751. Carbohydrate metabolism of lens in acute naphthalene poisoning, III, 752.
- Müller, H. O., electron microscopy in medicine, III, 1113.
- See also Eitel, W.
- Müller, J. H. See Liechti, A.
- Mueller, J. Howard, and Klotz, A. W., pantothenic acid as growth factor for diphtheria bacillus, III, 330.
- Müller, K. See Brockmann, H.
- Müller, K. L., and Schumacher, H. J., photochemical bromination of *trans*-dichloroethylene and the bromine-sensitized photodecomposition of dichlorodibromoethane, I, 330.
- Müller, Leo. See Bernhard, K.
- Mueller, M. B. See Marvel, C. S.
- Müller, O., and Storch, K., beech lignin, II, 121.
- Müller, O. H., and Baumberger, J. P., ketonol tautomerism of pyruvate ion studied polarographically, I, 268.
- Müller, P. See Goldberg, M. W., and Ruzicka, L.
- Müller, P. B., biology of oxalic acid. V. Oxalic acid of blood, III, 120.
- Müller, R. See Holtz, W.
- Müller, Reinhard. See Meier, R.
- Müller, R. H., photo-electric methods in analytical chemistry, I, 221.
- and Petras, J. F., rapid [determination of] traces of metals by the dropping mercury electrode, I, 98.
- See also Baker, H. H., jun.
- Müller, W. J., passivity and corrosion of metals, I, 202.
- Müllereisert, H. A., costo-clavicular joint, III, 805.
- Münch, H. See Hettehe, H. O.
- Muench, O. B., "Glorieta" monazite, I, 47.
- Mündel, O., rôle of the air in steam-sterilisation, III, 880.
- Münzberg, F. K., and Haurowitz, F., action of heavy water on protein and amino-acids at body temperature, III, 322.
- Muether, R. O., and Greutter, J. E., Laughlin test for syphilis, III, 332.
- Mufarrij, A. K. See Avery, B. F.
- Mugibayasi, N. See Katagiri, H.
- Mugrage, E. R., and Andresen, M. I., red blood cell values in adolescence, III, 1024.
- See also Andresen, M. I.
- Muilenburg, G. A. See Goldich, S. S.
- Muir, R., Paget's disease of nipple, III, 991.
- Muirhead, D. R. See Armstrong, A. R.
- Mukasa, H. See Yamamoto, S.
- Mukerjee, H. N., properties of tungstic acid and allied substances: chemo-therapy of tumours, III, 83.
- Mukerjee, L. N. See King, A.
- Mukerji, B., and Guha, R. C., effects of anterior pituitary extracts and choline on the liver-fat of rabbits, III, 149.
- and Iyengar, N. K., dextrorotatory hydrocupreidine derivatives. II. Comparative action on digestive enzymes, III, 90.
- See also Chopra, R. N., and Iyengar, N. K.
- Mukerji, S. K., hyperfine structure in the spark spectrum of arsenic in the ultra-violet, I, 111.
- and Aziz, S. A., Raman spectrum of *o*-diphenylbenzene, I, 509.
- and Singh, L., structure of *p*-diphenylbenzene and its Raman spectrum, I, 597.
- Mukherjee, P. L. See Nath, M. C.
- Mukherjee, S. K., correlation of acid members with the auriferous quartz veins in association with Dharwar formations in the western portion of the Raichur Doab, I, 163.
- Mukherji, A., vitamin-B complex in toxic conditions, III, 494. Determination of aneurin by thiochrome reaction with Pulfrich photometer, III, 1070.
- See also Qudrat-i-Khuda, M.
- Mukherji, P. C., absorption and omission spectra of rare-earth crystals, I, 502.
- See also Bose, D. M.
- Mukhopadhyay, B., pleochroism of sodium nitrate crystal, I, 407.
- Mulder, D. See Nauta, W. T., and Wuis, P. J.
- Mulder, E. G., influence of copper on growth of micro-organisms, III, 425.
- Mulder, J., *Haemophilus influenzae* of the respiratory type as a cause of purulent meningitis, III, 429.
- Mulder, J. D., spread of foreign substances in nerve, III, 244.
- Mulert, E., treatment of nocturnal enuresis [with Ca bromobisectate], III, 411.
- Mullinger, W. See Köster, W.
- Mulinos, M. G., Pomerantz, L., Smelser, and Kurzrok, R., cestrus-inhibiting effects of inanition, III, 979.
- and Shulman, I., vasoconstriction in the hand from a deep inspiration, III, 659.
- See also Gunter, M., and Kesten, H. D.
- Muller, H. J., reversibility in evolution from standpoint of genetics, III, 739.
- Muller, Henri J., variation of composition of the eutectic ice + potassium nitrate [caused] by addition of electrolytes, I, 371.
- Muller, J., vitamin-C exchange between mother and foetus, III, 604.
- Muller, P. See Govaerts, P., and Lambert, P. P.
- Mulliken, R. S., intensities of electronic transitions in molecular spectra. I. Introduction. II. Charge-transfer spectra. III. Organic molecules with double bonds; conjugated dienes. IV. Cyclic dienes and hyperconjugation. V. Benzene. VI. Molecular refractivities of organic compounds. VII. Conjugated polyenes and carotenoids. VIIIa. Odd-numbered conjugated polyene chain molecules and organic dyes (with notes on optical anisotropy and Raman intensities), I, 111, 177, 353, 551.

- Mulliken, R. S., interpretation of molecular spectra and study of molecular spectra in celestial objects. I. Intensities of electronic transitions in molecular spectra, I, 354.
See also Aston, F. W.
- Mullin, F. J. Dennis, J., and Calvin, D. B., blood-potassium in tetany and asphyxia of dogs, III, 233.
and Kleitman, N., variations in threshold of auditory stimuli necessary to awaken the sleeper, III, 468.
- Mumm, O., fluorescence and chemical constitution, I, 122.
and Diederichsen, J., hydrogenations and dehydrogenations in the pyridine series; model experiments for the mode of transportation of hydrogen by coenzyme, II, 339. Theory of allyl isomerisation, III, II, 478.
- Hurnhardt, H., and Diederichsen, J., theory of allyl isomerisation, II, II, 113.
- Mund, W., chemical reactions produced by α -particles, I, 379.
and Tiggelen, A. van, secondary reaction in the photolysis of ammonia, I, 208.
- Veighe, C., Devos, C., and Vanpee, M., radiochemical polymerisation of acetylene, I, 574.
- Munday, B., Shepherd, M. L., Emerson, L., Hamil, B. M., Poole, M. W., Macy, I. G., and Raiford, T. E., haemoglobin differences in healthy white and negro infants, III, 1025.
- Mundell, J. H. See Krueger, A. P.
- Munger, M., and Huddleson, I. F., blood picture in brucellosis, III, 549.
- Munk, F., skin potentials, III, 717.
- Munkelt, F. H., odour control in animal laboratories, III, 94.
- Muñoz, J. M. See Leloire, L. F.
- Munro, D., progress in neurosurgery, III, 572.
- Munro, H. N. See Cuthbertson, D. P.
- Munro, L. A., and Pearce, A., effect of polyhydric alcohols on time of set of alkaline silica gels, I, 77. Time of set of silica gels. III. Changing effects of alcohols over a pH range, I, 610.
- Munro, M. P. See Greig, M. E.
- Munro, S. S., effect of dilution and density on fertilising capacity of fowl sperm suspensions, III, 142. Effect of heredity on interior egg quality and shell composition, III, 590.
See also Crew, F. A. E.
- Munsell, H. E., vitamin-A, III, 164. Vitamin-B₁, III, 285.
- Munsey, V. E., [determination of] carotene, II, 566; III, 221.
- Munson, R. J., mobility of alkali ions in gases. III. Mobility of alkali ions in water vapour, I, 544.
and Hoeselitz, K., mobility of alkali ions in gases. II. Attachment of inert gas atoms to alkali ions, I, 544.
and Tyndall, A. M., mobility of alkali ions in gases. I. Attachment of water molecules to alkali ions in gases, I, 544.
- Munsterhjelm, A. See Granit, R.
- Munteanu, N. See Benetato, G.
- Muntsch, O., and Prathithavaniya, B., gas protection in cases of perforated eardrum, III, 95.
- Muntwyler, E. See Danielson, W. H., and Zorn, C. M.
- Muntz, J. A. See Miller, B. F.
- Murakami, R., effect of monochromatic light on action of enzymes. XII. and XVII. Yeast invertase. XIII. and XVIII. Yeast amylase. XIV. and XIX. Yeast proteinase. XV. and XX. Yeast lipase. XVI. and XXI. Yeast catalase, III, 625, 718, 783.
- Murakami, S. See Katagiri, H.
- Murakami, T., and Shibata, N., equilibrium diagram of the copper-antimony system. III. Transformations in the solid state, I, 464.
- Murakawa, K., electric quadrupole moment of the iodine nucleus, I, 290.
- Murao, S., fat metabolism of silkworms; changes in sterol content during the incubation period, III, 173.
- Muraour, H., Michel-Lévy, A., and Rouvillois, J., explosion luminosities, I, 227.
See also Fabre, P.
- Murata, K. J., exchangeable manganese in river and ocean muds, I, 628.
- Murata, R., blood in asphyxia caused by breathing excess of CO₂, III, 961.
- Muratori, F. See Pona, G.
- Muratori, G., vascular supply of the Peyer follicles, III, 63.
- Murdoch, J., polishing apparatus for ore minerals, I, 105. Crystallography of vetchite, I, 284. Garnet crystals from California, I, 435.
- Murdoch, R. See Sheehan, H. L.
- Murdoch, F. M. See Miller, W. T.
- Murgatroyd, F. See Findley, G. M.
- Murgier, (Mlle.) M., preparation of soluble molybdic acid, I, 274.
and Darmon, E., mutarotation of xylose, I, 478.
and Doucet, Y., preparation of the dihydrate MoO₃·2H₂O, and its cryoscopy in aqueous solution, I, 428.
See also Darmon, E.
- Murillo, R. See Lipschutz, A.
- Murless, B. C., follicular hormone and menopausal flushes, III, 756.
- Murlin, J. R. See Black, A.
- Murphy, E. J. See Whitaker, M. D.
- Murphy, G. M., and Vance, J. E., thermodynamic properties of hydrogen fluoride and fluorine from spectroscopic data, I, 556.
- Murphy, J. A., and Jones, C. A., slow epinephrine in treatment of chronic asthma, III, 682.
- Murphy, K. W., Schilling, W., and Emge, L. A., effect of prolonged theelin injections on transplantable mammary adenofibroma, III, 266.
- Murphy, R., avitaminosis-K produced in mice by dietary means, III, 706.
Lowther, S., and Pagnello, L., organ hypertrophy following injections of thyrotropic hormone, III, 379.
- Murphy, R. G., Dustin, C. C., and Bowman, R. O., hyperinsulinism due to adenoma of the pancreas, III, 975.
- Murphy, R. R., Hunter, J. E., and Kandel, H. C., effects of rations containing graded amounts of cod-liver oil on subsequent performance of laying pullets following a natural infection of coccidiosis, III, 170.
- Murphy, W. P., and Howard, I., use of concentrated liver extracts in pernicious anaemia, III, 548.
- Murray, (Miss) A. R. See Taylor, T. W. J.
- Murray, C. See Wilcke, H. L.
- Murray, G. D. W., and Best, C. H., use of heparin in thrombosis, III, 232.
- Murray, G. E., and Warren, B. E., X-ray study of benzene-cyclohexane mixtures, I, 249.
- Murray, M., effect of thymus transplants on tumour growth, III, 1064. Antigenic properties of streptococci killed by ultra-violet light, III, 1102.
- Murray, M. J., effect of the triple linking on the rate of reaction of ω -chlorides with potassium iodide in absolute acetone, I, 31.
and Cleveland, F. F., Raman spectra of acetylenes. I. Derivatives of phenylacetylene, CPH-CA, I, 9.
and Waters, D. E., ammonium chloride-sodium sulphide solutions for organic nitro-reductions and for inorganic qualitative analysis, I, 37.
See also Cleveland, F. F.
- Murray, M. M. See Bowes, (Miss) J. H., Glock, G. E., and Thewlis, J.
- Murray, T. J. See Morris, M. L.
- Murray, W. S., genetic segregation mammary cancer to no mammary cancer, in the mouse, III, 490.
See also Little, C. C.
- Murrell, (Miss) E. B. M. See Smith, C. L.
- Murrell, M. See Batchelor, R. C. L.
- Murrell, T. W., positive Wassermann reaction in spirochetal infections other than syphilis, III, 1103.
- Murtazaev, A., and Abramov, M., electrocapillary curves in non-aqueous solution. I. Capillary-active organic cations in methyl alcohol, I, 520.
- Murti, G. V. L. N., and Seshadri, T. R., Raman effect and chemical constitution; influence of constitutive and other factors on the double bonds in organic compounds. I. Coumarin, I, 121. Behaviour of organic solids on the surface of water, I, 255. Molecular complexes in chloroform solution, I, 403.
- Murty, P. B. R., and Seshadri, T. R., composition of *Vitis quadrangularis*, Wall., III, 638.
- Musajo, L., coloured substance excreted in urine after administration of cinchoninic acid, III, 619.
- Musante, C., new method of introducing the cyano-group into compounds containing methylene with mobile hydrogen, II, 524.
See also Fusco, R.
- Muschat, M., Meranze, D. R., and Abrams, H., chemistry of the urine after renal decapsulation for anuria, III, 391.
- Musehold, W. See Riechert, W.
- Musheev, V. A., Sviderskaja, T. A., and Schitova, Z. I., role of motor and sympathetic nerve endings in use of phosphagen by muscles during work and their interaction during resting metabolism, III, 663.
- Mushin, R., physiology of plant pathogenic bacteria; food requirements of a xylem- and a phloem-invader, III, 329.
- Musser, J. H., pellagra, III, 166.
- Mussey, R. D., hyperthyroidism complicating pregnancy, III, 679.
- Mussnag, F. See Kraus, O.
- Musulin, R. R., Tully, R. H., Longenecker, H. E., and King, C. G., effect of lipin feeding on vitamin-C excretion by the rat, III, 291. Vitamin-C synthesis and excretion by the rat, III, 922. Acceleration of vitamin-C synthesis and excretion by feeding organic compounds to rats, III, 922.

- Mutch, J. R., and Richards, M. B., keratoconus experimentally produced in rat by vitamin-A deficiency, III, 1040.
See also Thomson, A. M.
- Muthanna, M. S. See Guha, P. C.
- Mutius, I. von. See Heilmeyer, L.
- Muto, T. See Sato, H.
- Mutruz, S., nuclear lesions in the early chick neural tube, III, 543.
- Mutsaers, W., impeding effect of diazotised gelatin on fixation of alexin by horse anti-nitroserum and the corresponding antigens, III, 11. Impeding effect of diazotised gelatin on precipitation of human nitro- and diazo-serum by horse and anti-nitroserum, III, 11. Serological study of xanthoproteins. I. and II., III, 531, 634.
- Mutzenbecher, P. von. See Ludwig, Willy.
- Muus, J., Weiss, S., and Hastings, A. B., tissue metabolism in vitamin deficiencies. II. Effect of thiamine deficiency, III, 854.
See also Hastings, A. B.
- Myers, A. T., and Brunstetter, B. C., preparation of carbon electrodes for spectrographic analysis, I, 339.
See also Brunstetter, B. C.
- Myers, D. R. See Wolfrom, M. L.
- Myers, E. E., blood-crossing block, III, 814.
- Myers, F. J. See D'Ouville, E. L.
- Myers, H. I. See Young, W. C.
- Myers, J. See Todd, W. R.
- Myers, J. T. See Posner, J. L.
- Myers, R. M., and Perry, C. A., significance of the positive Kline exclusion test, III, 206.
- Myers, V. C. and Eddy, H. M., hæmoglobin content of human blood, III, 352.
See also Danielson, W. H.
- Myers, W. H. See Robertson, G. J.
- Myerson, A., and Neustadt, R., influence of ultra-violet irradiation on excretion of sex hormones in the male, III, 982.
See also Cohen, B., Loman, J., and Schube, P. G.
- Myerson, M. C., intranasal preventive treatment of poliomyelitis, III, 180.
- Mygind, S. H., and Dederding, D., Meniere's disease as an indicator of disturbances in water metabolism, capillary function, and body condition, III, 255.
- Myhre, H., sulphanilamide agranulocytosis, III, 859. Basophil stippling of erythrocytes in sulphanilamide anemia, III, 1025.
- Myrback, K., oxidation of aldoses by hypiodite. I.—IV., I, 615; II, 142, 244, 490. Constitution and enzymic degradation of starch, II, 143. Yeast and trehalose. II., III, 520.
and Ortenblad, B., action of amylases on substances of low mol. wt., II, 99. Action of amylases on starch breakdown products, III, 199.
See also Larsson, A.
- Mystkowski, E. M., and Lasocka, D., factors preventing oxidation of ascorbic acid in serum, III, 995.
- N.
- Nábelek, V., action of apple aroma on plant tumours, III, 883.
- Naber, A. D. See Denisenko, J. I.
- Nabholz, A. See Krupski, A.
- Nabholz, H. See Hegglin, R.
- Nabonne, A. See Sohler, R.
- Nachmansohn, D., transmission of the nervous impulse in the central nervous system, III, 32. Action of strychnine, III, 374. Choline-esterase in voluntary muscle, III, 464. Inhibition of choline-esterase, III, 871. Choline-esterase in central nervous system, III, 902.
and Lederer, E., chemical properties of choline-esterase, III, 517. Biochemistry of choline-esterase. I. Preparation of enzyme and role of thiol groups, III, 870.
- Nachtsheim, H., action of cardiazol in epileptics, III, 250.
- Nader, D. N. See Rubinstein, H. S.
- Nadler, W. H. See Burgert, P. H.
- Naef, A., development of gill pouches and nephridia of larval and metamorphosing *Amphioxus*, III, 888.
- Naegeli, C., Kündig, W., and Brandenburger, H., 2-aminopyridine-5-sulphonamide and its derivatives, II, 35. Pyrid-2-one-5-sulphonamide and derivatives, II, 446.
- Naerebout, A. See Stokvis, B.
- Narvánen, R. See Kalaja, L.
- Näsanen, R., action of hydrogen and nitrogen on a not degassed graphite electrode during glow discharge, I, 573.
See also Sihvonen, V.
- Naess, T. See Kringstad, H.
- Naffziger, H. C., progressive exophthalmos associated with disorders of the thyroid gland, III, 257.
- Naftel, J. A., colorimetric micro-determination of boron, I, 487.
- Nag, N. C., and Banerjee, H. N., oil-soluble vitamins in *Cicer arietinum*, III, 284.
- Nagai, K., influence of serum in renal disturbances on culture of tissues, III, 1029.
- Nagao, N. See Sasaki, Takaoki.
- Nagasawa, F. See Ochiai, E.
- Nagata, S. See Go, Y.
- Nagatomi, I., influence of ligation of a branch of the portal vein on liver function and resistance, III, 149.
- Nagel, A., connective tissue of the human œsophagus and its relation to plain muscle and blood vessels, III, 269. Connexions of elastic and muscle fibres of tunica dartos, especially in relation to blood vessels, III, 808.
- Nagel, F., presence of lipins in cerebrospinal fluid demonstrated by saponin hæmolysis, III, 374.
- Nagel, K. See Lange, Erich.
- Nagel, M., pernocton anaesthesia in surgery, III, 186.
- Nagel, R. H., micro-titrimetric dry combustion method for carbon. II. Modified titration vessel, II, 193.
See also Niederl, J. B.
- Nagel, Werner, and Mertens, Willi, shellac. XII. Degradations of shellolic acid, II, 332.
- Nagell, H., chemotherapy of gonorrhœa with a new sulphonamide compound, III, 410.
- Nageotte, J., the neurone theory in the light of recent work, III, 32.
- Naggiar, V., orientation of a suspended drop of an anisotropic liquid in a magnetic field, I, 454.
- Nagl, F., significance of indifferent electrode in chest leads, III, 655.
- Nagle, N. See Brown, E. C.
- Nagorski, A. See Morgulis, N. D.
- Nagy, R., Riker, A. J., and Peterson, W. H., physiology of crown gall and contiguous tissue, III, 215.
See also Riker, A. J.
- Nahmias, M. E., probable emission of mesotrons in nuclear disintegrations, I, 174.
- Hopwood, F. L., Banks, T. E., Rann, W. H., and Grimmett, L. G., apparent existence of a very penetrating radiation from radium and (radium + beryllium), I, 444.
- Nahum, L. H., and Hoff, H. E., potassium fibrillation, III, 506. U wave of electrocardiogram, III, 820.
See also Hoff, H. E.
- Naik, R. G., and Wheeler, T. S., reactivity of the ω -halogen atom in *p*-alkoxybenzyl halides: preparation of phenylacetic acids, II, 19.
- Naik, Y. G. See Paranjpe, G. R., and Tawde, N. R.
- Naito, H., and Ishimaru, K., enzymes in fruit and vegetables; determinations of ascorbic acid and activity of its oxidase in tomato tissue, III, 97.
- Naka, S., glycogen of brain. I. Micro-determination of glycogen and other reducing substances in brain. II. Distribution of glycogen in brain: comparison of chemical and histological methods of determining glycogen. III. Effect of disease on glycogen content of brain. IV. Constancy of content of reducing substances in brain, III, 251.
- Nakagawa, K., influence of cellular emulsions of lung and other organs of rabbits introduced parenterally on blood-lipase in the pulmonary circulation, III, 14.
- Nakahara, K. See Tange, M.
- Nakahara, W., and Fujiwara, T., carcinogenesis experiments based on intraperitoneal injections. III. Dimethyl-aminoozobenzene, III, 491.
- Mori, K., and Fujiwara, T., effect of liver feeding on experimental production of liver cancer, III, 492. Does vitamin-B₁ inhibit the experimental production of liver cancer? III, 492. Inhibiting effect of yeast feeding on experimental production of liver cancer, III, 598.
See also Kishi, S.
- Nakai, T., calcio-gadolinite, a new variety of gadolinite found in Tadati village, Nagano prefecture, I, 47.
- Nakaidzumi, M. See Nishikawa, S.
- Nakajima, N., mechanism of development of pneumonia by action of specific soluble substance of pneumococci type 3, III, 331.
- Nakajima, T. See Kinoshita, M.
- Nakamiya, Z., unsaponifiable matter from liver oils. I. Chimyl alcohol, II, 96. Correlation between international unit and cod-liver oil unit of vitamin-A. III., III, 850.
and Takizawa, K., spectrographic determination of vitamin-D, III, 923.
- Nakamoto, T. See Hasegawa, S.
- Nakamura, H., metabolism of purple bacteria. IV. Role of hydrogenase in the metabolism of *Rhodospirillum rubrum*, III, 102. Carbon dioxide utilisation by lower algae in the presence of hydrogen sulphide, III, 108. Effect of hydrocyanic acid on photosynthesis of *Scenedesmus*, III, 108.

- Nakamura, H., Okamura, H., Tanaka, K., and Wakabayasi, M., short and ultrashort waves, their effects on glycogen, vitamin-C, glutathione, calcium, potassium, and oxidase reaction, III, 96.
- Yamada, M., Okamura, H., Yoda, Y., and Nishi, T., intravenous application of butter-yellow and *o*-aminoazotoluene, III, 69.
- See also Yamagata, S.
- Nakamura, K., and Takahashi, Y., anaphylactic reaction, III, 92.
- Nakamura, Katutarō. See Kuwada, S.
- Nakamura, Seiji. See Go, Y.
- Nakamura, Takashi, influence of avertin rectal narcosis on alkali reserve and blood-sugar, III, 87. Respiration of tubercle bacilli, III, 728.
- Nakamura, Takao. See Kawai, S.
- Nakamura, Toshiharu. See Ochiai, E.
- Nakanishi, M., Cannon's theory of emotion, III, 572.
- Nakano, K. See Nakatani, M.
- Nakano, S. See Kimura, W.
- Nakaoki, T., pigments of the flavone series. V. Diosmin, a constituent of dahlia flowers, II, 441.
- Nakatani, M., Nakano, K., and Ohara, Y., tissue metabolism during development of liver cancer induced by feeding dimethylaminoazobenzene, III, 69.
- Nakano, K., Ohara, Y., and Ishii, S., presence of oestrogens in ascitic fluid of carcinoma patients, III, 991.
- Nakaya, S. See Takahashi, Hiraku.
- Nakayama, H. See Nishina, Y.
- Nakayama, M. See Kaya, S.
- Nakayama, T., relationship between muscular exercise and nitrogen metabolism. I.—III, III, 170, 293.
- Nakazawa, K., γ -substituted resorcinol derivatives. I. Synthesis of γ -resorcaldehyde, II, 427.
- Nametkin, S. S., and Pokrovskaja, E. S., products of condensation of benzene with cyclopentene in presence of aluminium chloride, II, 54.
- Namiatuicheva, A. M. See Fedorov, N. A.
- Namoradze, Z. G. See Zvjagintzev, O. E.
- Nanba, K. See Katsura, S.
- Nanek, E., correlation between development of shape of sternum and development of the liver, III, 800.
- Nanjo, K. See Iwatsuru, R.
- Nanu, I. See Tanasescu, I.
- Napier, L. E., and Majumdar, D. N., haematological studies in Indians. IX. 57 cases of anaemia in pregnant tea-garden coolie women, III, 227.
- Narain, S. See Anand, B. M.
- Narang, K. S. See Bakshi, H. S., and Dugan, B. S.
- Narasaka, S., biochemistry of copper. XXXIII. Metabolism of copper and adrenaline in normal and thyroidectomised animals. XXXIV. Significance of the thyroid in copper metabolism, III, 176.
- Narasimham, M., and Pal, S. N., analysis of algae, III, 733.
- Narasingarao, M. See Vidyarthi, N. L.
- Narath, A., theory of the Schwarzschild effect, I, 330.
- Narayana, B. See Alcock, P.
- Narayana, N. See Abhyankar, V. S.
- Narayanan, E. K. See Damodaran, M.
- Narayanawami, R., measurements of chloride, nitrate, and nitrite present in the water of the monsoon rains at Bombay, I, 540.
- Narayanawamy, A. S. See Rao, S. R.
- Narayanayya, Y. V. See Ramiah, P. V.
- Narbutovitch, I. O. See Majorov, F. P.
- Nargund, K. S. See Dalal, G. A., Dave, K. P., Phalnikar, N. L., and Raval, J. D.
- Narishkin, I. I., vapour pressure of salts at high temperatures, I, 557.
- Nariyama, A. See Mizuta, N.
- Naruse, N. See Sata, N.
- Narvaez, P., new blood culture media apparatus, III, 729.
- Naschtschenko, J. N. See Kirsanov, A. V.
- Nash, A. W. See Nissan, A. H.
- Nason, G. I. See Forbes, H. S.
- Nason, H. K. See Carswell, T. S.
- Nasonov, D. N., response reaction of living protoplasm to the action of various stimulants, III, 417. Influence of non-electrolytes on water content of living muscles and on swelling of gelatin, III, 420.
- and Alexandrov, V. J., action of poisons on protoplasm; inhibition of adsorption; adsorption changes in living but moribund cells; paraneerosis, III, 417.
- Nassim, R. See Solandt, D. Y.
- Natanson, G. L., photochemical reaction of fluorescent dyes, I, 574.
- Natanson, L., spectrum of Pb₂, I, 290.
- Natanson, N. E. See Krestinskaja, V. N.
- Natanson, S., optical sensitisation of silver halides. VII. Spectral sensitivity and absorption spectrum of sensitised layers of silver bromide, I, 620.
- Natelson, S., and Gottfried, S. P., Reformatsky reaction; efficient procedure for preparation of bromoacetic ester in large quantities, II, 241. Dehydration of hydroxy-compounds by pyrolysis of their potassium sulphate esters: cholesterylene and camphene, II, 254. Synthesis of derivatives of *s*-diphenylethane related to materials occurring naturally. II. 3'-Methoxy-5-methyl-3:4-dihydrodibenzyl, a compound related to castrone in structure, II, 313.
- Nath, M. C., modifications of Pregl's method for the micro-analytical determinations of carbon and hydrogen in the humid summer atmosphere of a tropical country, II, 193.
- and Mukherjee, P. L., crystallographic investigation of artostenone, the stenone isolated from the Indian summer fruit, *Artocarpus integrifolia*, by means of goniometer and X-rays, I, 458.
- Nath, N. S. N., diffraction of light by supersonic waves, I, 133.
- Nathanson, I. T., and Andervont, H. B., effect of testosterone propionate on development and growth of mammary carcinoma in female mice, III, 1056.
- Franseen, C. C., and Sweeney, A. R., jun., nature of action of testosterone on genital tract of the immature female rat, III, 268.
- and Salter, W. T., experimentally induced benignancy of neoplasm. II. Effect of oestrogen and castration of host, III, 699.
- Towne, L. E., and Aub, J. C., daily excretion of urinary androgens in normal children, III, 482.
- See also Fevold, H. L., and Partington, P. F.
- Nathanson, M. H., action of *p*-hydroxyphenylisopropylamine on the heart, and Fitzgibbon, J. P., pharmacology of Cheyne-Stokes respiration, III, 931.
- Natis, N. A., showings of gas in the Lower Niman region, I, 541.
- Nattan-Larrier, L., Steeg, L., and Dufour, J., choice of temperature for the inactivation [of the complementary power] of sera, III, 11.
- Natzvlischvili, E. R., and Bergman, A. G., chemistry of manganese salt melts. I. Reaction of manganese chloride with chlorides of univalent metals, I, 532.
- Nauck, E. T., topogenesis of the heart and phrenic nerves, III, 345. Development of shape of thoracic and lumbar part of spine, III, 956.
- Naumann, H. N., saturation of serum with CO₂; simple test for hyperglobulinæmia, III, 232.
- Naumova, G. Z. See Joffe, J. S.
- Naundorff, G. See Amlong, H. U.
- Nauta, W. T., and Mulder, D., diarylmethano derivatives. V. Derivatives of bis-(2:4:6-triethylphenyl)methane, II, 306.
- Naville, M. See Mach, R. S.
- Navratil, E., influence of parturition on serum choline-esterase, III, 756.
- and Spurny, J., human placenta and choline-esterase, III, 985.
- Nawa, K., specificity of histozyms, III, 196.
- Nayar, M. K., constitution of iodic acid, I, 242.
- Srivastava, L. N., Sen, A. B., Gopal, R., and Sharma, P. N., constitution of iodic acid. III, I, 198.
- Nayar, P. G. N., chart of the Raman bands of water in crystals, I, 120.
- Nayder, T. See Piech, T.
- Nazarenko, V. A., reactions of aminophenols with copper and iron, II, 313.
- Nazarov, I. N., derivatives of vinylacetylene. II. Condensation of vinyl- and isopropenyl-acetylene with ketones to give vinylacetylenylcarbinols. III. Esterification and dehydration of vinylacetylenylcarbinols; acetates of vinylacetylenylcarbinols and homologues of divinylacetylenes. IV. Ethers of vinylacetylenylcarbinols. V. β -Alkoxyethyl ethers of vinylacetylenylcarbinols. VI. Hydrolysis and alcoholysis of vinylacetylenylcarbinol ethers, II, 198.
- and Kuvarzina, M. V., derivatives of vinylacetylene. I. Esters of vinyl- and isopropenyl-propionic acid, II, 198.
- Nazarov, V., and Nikolaev, A. V., application of N. S. Kurnakov's pyrometer in the investigation of gelatinisation of potato starch, I, 197.
- Nazarova, L. M. See Konikov, A. P.
- Nazarova, Z. N., structure of amyphenols, II, 258.
- See also Tzukervanik, I. P.
- Neal, J. B., treatment of acute infections of the central nervous system with sulphanilamide, III, 176.
- Neal, P. A., mercury poisoning from the public health viewpoint, III, 621.
- Neamtan, S. M. See Foster, J. S.
- Nebe, E. See Hein, F.
- Nebel, B. See Höber, R.
- Necheles, H., and Neuwelt, F., antagonism between pituitary secretion and acetylcholine, III, 259.
- Nectoux, R., and Besredka, A., anaphylaxis and antianaphylaxis in the rabbit, III, 512.
- See also Jahiel, R.
- Neddermeyer, S. H. See Anderson, C. D.
- Nederbragt, G. W. See Michels, A.

- Nedler, V. V., spectral method of determination of molecular composition, I, 94.
- Nedungadi, T. M. K., scattering of light in sodium nitrate crystals. I, I, 120.
See also Raman, (Sir) C. V.
- Nedved, M., distillation apparatus for determination of nitrogen in small amounts, I, 540.
- Nedzel, A. J., experimental gastric ulcer (pitressin episodes), III, 48.
- Needham, D. M., and Lu, G. D., specificity of coupled esterification of phosphate in muscle, III, 80.
See also Lu, G. D.
- Needham, J., and Boell, E. J., ultra-micro-Kjeldahl technique, I, 214. Metabolic properties of the regions of the amphibian gastrula, III, 224.
- Needles, R. J. See Smith, F. J.
- Néel, L., application to nickel of a new method of measurement of true specific heats, I, 133. Specific heats and fluctuations of molecular field, I, 189. Relation between the Curie points of the metals of the ytterbium earth group, I, 360.
- Negelein, E., and Bromel, H., protein of α -amino-acid oxidase, III, 517. Reversible intermediate product of fermentation, III, 788.
- Nehb, W., standardisation of chest leads for the electro-cardiogram, III, 235.
- Neher, H. V. See Millikan, R. A.
- Neidhardt, K., and Blasius, W., course of essential hypertension, III, 365.
- Neiger, R. See Hermann, S.
- Neil, J. H., Gilmour, W., and Gwynne, F. J., anatomy of the bronchial tree, III, 563.
- Neilsen, W. M., primary and secondary cosmic rays, showers, and bursts, I, 5.
- Nelson, E. K., and Corley, R. C., retention of nitrogen of mixtures of amino-acids administered to rats fed diets low in protein, III, 1076.
- Neiman. See under Neuman.
- Neish, A. C., chloroplasts. I. Separation, factors affecting flocculation, and calculation of chloroplast content of leaf tissue from chemical analysis. II. Chemical composition and distribution of metabolites between chloroplasts and remainder of leaf, III, 440.
- Neisser, H., serological typing of *Streptococcus pyogenes* and its application to infective conditions, III, 430.
- Neisser, K. See Slotta, K. H.
- Neitzel, W. See Barnard, R. D.
- Nekhorosheff, I. See Dobrovolskaia-Zavadskaja, N.
- Nekritsch, M. I., reduction of sulphates and their mixtures by means of methane, I, 90.
- Nélis, P., bactericidal power of oils, particularly cod-liver oil, III, 531. Bactericidal power of cod-liver oil on sporing bacteria, III, 633. Agglutino-genic properties of *B. paratyphosus* B treated by cod-liver oil and its bactericidal extracts, III, 876.
and Thomas, G., bactericidal power of oils, particularly cod-liver oil, III, 880.
- Nell, W., chloride excretion in the bile and hypochloramic uræmia after operations on the biliary tract, III, 273.
- Nellensteyn, F. J., rise of liquids in capillaries, I, 415.
- Nelson, A. A., giant interstitial cells and extraparenchymal interstitial cells of the human testis, III, 141.
- Nelson, A. A., accessory adrenal cortical tissue, III, 840.
- Nelson, C. See Lombard, C. F., and Rioch, D. McK.
- Nelson, C. M., cause of chills following intravenous therapy, III, 743.
- Nelson, D. E. See Kozeika, F. L.
- Nelson, E. E., phenanthrene derivatives. VIII. Action of phenanthrene derivatives on the isolated frog heart, III, 713.
- Nelson, E. K., and Curl, A. L., volatile flavour and fixed acids of Montmorency cherry juice, III, 638.
- Nelson, E. M., determination and sources of vitamin-D, III, 169.
See also Kline, O. L.
- Nelson, G. H., Weihe, H. D., and Lynch, D. F. J., simplified combustion pipette, I, 281.
- Nelson, H., secondary electron emission, I, 394.
- Nelson, J., Rinzler, H., and Kelsey, M. P., sulphanilamide treatment of erysipelas, III, 773.
- Nelson, J. B. See Broeck, C. T.
- Nelson, J. F. See Corkill, A. B., and Gilman, H.
- Nelson, J. M. See Adams, Mark H., Bordner, C. A., and Dalton, H. R.
- Nelson, M. V. See Hartmann, A. F.
- Nelson, N., Grayman, I., and Mirsky, I. A., utilisation of β -hydroxybutyric acid by fed and fasted rats, III, 174.
See also Mirsky, I. A.
- Nelson, R., colusito—its occurrence, paragenesis, and genetic significance, I, 542.
- Nelson, R. C., and Warkany, J., changes in the anterior pituitary gland of rats with experimental goitre, III, 48.
- Nelson, S. E., rôle of heredity in stuttering, III, 834.
- Nelson, W. O., atypical uterine growths produced by prolonged administration of oestrogenic hormones, III, 263.
See also Gaunt, R.
- Němejc, J., detection of boric acid in [natural] waters by the curcumin reaction, I, 38.
- Nemilov, V. A., and Voronov, N. M., tantalum-iron alloys, I, 251.
- Nemitz, K. See Thiele, W.
- Nemtsov, M. S., Nizovkina, T. V., and Soskina, E. A., pyrogenic reactions of condensation of hydrocarbons. VI. Thermo-polymerisation of cyclo-hexene. VII. Thermo-polymerisation of *n*-octene, I, 326.
- Nenceva, N. See Redaelli, P.
- Neinitescu, C. D., catalysis by means of aluminium chloride, I, 270.
Gavât, I., and Cocora, D., reactions catalysed by aluminium chloride. XVIII. Condensation of 9:10-dihydroanthracene with acid chlorides, II, 268.
- Isaescu, D. A., and Gruescu, C., introduction of arsenic into the aromatic nucleus by means of mercury compounds, II, 565. Mercuration of benzene and chlorobenzene, II, 565.
- Nenninger, L. See Weidenhagen, R.
- Neogi, P., and Mondal, K. L., resonance reaction. II, II, 404.
- Neporent, B. See Terenin, A.
- Neporent, M. I., X-ray kymography of stomach, III, 592.
- Nepveu, P. See Pussard, R.
- Neret-Cauchy, defence phenomena of the organism: biophylaxy, III, 93.
- Neri, V., and Chiatellino, A., function of the thalamus, III, 467.
- Nesmejanov, A. N. See Markova, L. G.
- Nešpor, E., vitamin-C in human seminal fluid, III, 604.
and Wenig, K., vitamin-C [requirements] of invertebrates, III, 922.
- Nessel, V., simple arrangement for measuring specific resistance of liquids, I, 538.
- Nesselschtraus, G. Z., simplified electrode for potentiometric measurements, I, 159.
- Nestier, R. B. See Byerly, T. C.
- Nestmann, hormonal treatment of prostatic hypertrophy, III, 386.
See also Hermannsen, J.
- Nesvadba, V. V. See Sergievskaja, S. I.
- Neter, E., effect of sulphanilamide on viability of meningococci in spinal fluid, III, 305. Bacteriostatic action of sulphanilamide on hæmolytic streptococci *in vitro*, III, 502.
- Weintraub, D. H., and Dayman, A. L., concentration of sulphanilamide in spinal fluid and blood following single intrathecal injection of drug, III, 927.
- Netschitailo, M. K. See Borshkovski, S. E.
- Netter, A. See Sartory, A.
- Netter, R., nickel "insulinate," II, 397.
- Nettleship, A., mechanism of leucocytosis, III, 113.
- Neu, R., aryl iodochlorides. I, II, 472.
- Neubauer, H. F., effect of "ringing" of stems on the carbohydrate content of leaves, III, 212.
- Neubauer, L. G. See Brandt, C. W.
- Neuberg, C., and Ziffer, R., enzymic cleavage of acetals, III, 422.
- Neuberger, A., titrations with polarometric end-point readings, I, 276. Chemical aspects of the cyclol hypothesis, II, 294. Protein molecule, III, 785.
and Pitt-Rivers, R. V., preparation and configurative relationships of methylglucosaminides, II, 101. Hydrolysis of glucosaminides by an enzyme in *Helix pomatia*, II, 534.
- Neuenschwander-Lemmer, N. See Hausberger, F. X.
- Neuert, H., angular distribution of transmuted particles in the transformations $D + D = {}^3\text{H} + p$ and ${}^{11}\text{B} + p = {}^8\text{Be} + \alpha$, I, 115. Angular distribution of protons emitted in the process ${}^6\text{Li} + D \rightarrow {}^7\text{Li} + {}^1\text{H}$, I, 115.
- Neufeld, A. H., and Collip, J. B., effects of pituitary extracts on carbohydrate and fat metabolism, III, 258.
- Neufeld, F., and Schiemann, O., action of alcohol in disinfection of the hands, III, 797.
- Schiemann, O., and Kuhn, H., surgical disinfection, III, 775.
- Neugebauer, R. See Kaunitz, H.
- Neugebauer, T., magnetic moments of heavy nuclei, I, 6. Theory of the Cotton-Mouton effect in quantum mechanics, I, 303. Comparison of the quantum-mechanical formulæ derived from magnetic birefringence with experimental results, I, 454.
- Neuking, P. See Schlomka, G.
- Neuman, M. B., differential indicator with a combination of membranes of different sensibility, I, 45. Role of peroxides in formation of cold and hot flames of hydrocarbons, I, 149.
and Tutakich, P. M., mechanism of the formation of cold and hot flames of butane, I, 268.
See also Aivazov, B. V., Avramenko, V. I., Blat, E. J., and Dobrinskaja, A. A.

- Neumann, E., pervitin, III, 1087.
- Neumann, E. (Aachen). See Benrath, A.
- Neumann, H. See Diehl, F.
- Neumann, K., and Lichtenberg, E., mol. wt. and vapour pressure of selenium, I, 410.
- Neumann, R. See Kraut, H.
- Neumann, V., absolute light yield, excitation functions, and intensity relations in helium, neon, and argon spectra excited by atomic collision at velocities from 0 to 4500 volts, I, 291.
- Neumann, Wilhelm, influence of acids and alkalis on activity of digitalis substances, III, 182.
- and Klimmer, O., apparatus for administering liquids and gases, III, 804.
- Neumark, E. Kulashina, L. P., and Poljakov, M. V., kinetics of the slow oxidation of hydrogen, I, 203.
- Neumayer, R. See Sievers, K.
- Neundeubel, L. See Jancke, E.
- Neunhoeffer, O., and Liebich, H. G., rearrangement of 1-naphthylhydroxylamine, II, 15.
- and Paschke, P., mechanism of formation of ketones from carboxylic acids, II, 244.
- and Pelz, W., catalytic hydrogenation of organic compounds with carbon monoxide, II, 167.
- and Weise, J., action of diazonium compounds on 2-hydroxy-1:4-naphthoquinone, II, 77.
- Neurath, H., apparent shape of protein molecules, III, 938.
- and Saum, A. M., diffusion of tobacco-mosaic virus protein in aqueous solution, III, 336. Denaturation of serum-albumin; diffusion and viscosity of serum-albumin in presence of urea, III, 622.
- Neustadt, R., photo-colorimetric determination of androsteroles in urine, III, 266.
- See also Myerson, A.
- Neuteboom, J. J., glycogen disease, III, 173.
- Neuwahl, F. J., Bulgarian belladonna in postencephalitic Parkinsonism, III, 505.
- Neuwald, F., constituent of the root of *Ononis spinosa*, L., II, 221.
- See also Jaretsky, R.
- Neuweiler, W., vitamin-C absorption from the placenta, III, 167. Vitamin-C content of placenta, III, 704. Vitamin-C requirements, III, 767. Vitamin-C problems, III, 995.
- Neuwelt, F. See Necheles, H., and Rubovits, W. H.
- Neuwirth, A. See Hock, H.
- Nevell, T. P., De Salas, E., and Wilson, C. L., use of isotopes in chemical reactions. I. Mechanism of the Wagner-Meerwein rearrangement; exchange of radioactive chlorine and of deuterium between camphene hydrochloride and hydrogen chloride, II, 434.
- Never, H. E. See Bamberger, P., Bertram, F., and Fretwurst, F.
- Neves e Castro, A., sexual cycle in the mare, III, 263.
- Nevji, M. B., susceptibility constants of thallium in different states, I, 247. Diamagnetism of inorganic liquid compounds, I, 247. Diamagnetism and colloidal electrolytes, I, 257.
- See also Bhatnagar, S. S.
- Neville, E. H., vector maps as positive evidence in crystal analysis, I, 64. Vector map of the cyclo C₆ molecule, I, 512.
- Nevin, S. See Walter, W. G.
- Nevin, T. E., rotational analysis of the first negative band spectrum of oxygen, I, 111.
- New York State, how New York State operates, III, 315.
- Newburgh, L. H., and Conn, J. W., new interpretation of hyperglycemia in obese middle-aged persons, III, 500.
- See also Conn, J. W., and Johnston, M. W.
- Newitt, D. M., and Outridge, L. E., ultra-violet absorption bands ascribed to nitrous acid, I, 57.
- Newman, B. A., dermatitis caused by diethylene glycol, III, 91.
- Newman, G. C. See Hooker, C. W.
- Newman, H. W., Doupe, J., and Wilkins, R. W., nature of vibratory sensibility, III, 664.
- See also Doupe, J., Hanzlik, P. J., and Wilkins, R. W.
- Newman, M. See Darling, M. A.
- Newman, M. S., synthesis of chrysene derivatives, II, 55.
- and Orchin, M., synthesis of 6-chloro-10-methyl-1:2-benzanthracene and related compounds, II, 159.
- Newns, G. H. See Engel, S.
- Newport, N. M. See Moor, H. D.
- Newsom, I. E., and Thorp, F., jun., toxicity of intestinal filtrates from lambs dead of overeating, III, 190.
- Newton, J. M., and Taylor, N. M., soyabean amylase. I. Concentration and characterisation, III, 423.
- Newton, M. I. See Stier, T. J. B.
- Newton, W. See Edwards, H. I.
- Newton, W. H., technique of hypophysectomy in the rabbit, III, 575.
- and Beck, N., placental activity in mouse in absence of pituitary gland, III, 1055.
- and Lits, F. J., criteria of placental endocrine activity in the mouse, III, 588.
- and Young, F. G., influence of glycotropic (anti-insulin) factor of anterior hypophysis on insulin-sensitivity of hypophysectomised rabbit, III, 46.
- Ney, G. See Benoit, J.
- Ney, J. See Cobb, S.
- Neymann, N., cholesterol content of foetal adrenals, III, 911.
- Nga, (Mlle.) H. T., reduction of orange-2 and metanil-yellow at the dropping mercury electrode, I, 84. Influence of concentration on reduction potential of sulphonated monoazo-dyes at the dropping mercury electrode, I, 475. Polarographic study of reduction of metanil-yellow at a dropping mercury electrode, I, 475.
- Nguyen-Van-Lien. See Lataste, C.
- Nhavi, N. G. See Patwardhan, V. N.
- Ni, T. G., prevention of nutritional encephalomalacia in chickens, III, 71.
- Nibarger, A. See McKinley, L.
- Nicewonger, R. See Beattie, M.
- Nichita, G. See Vladescu, R.
- Nicholes, H. J. See Herrin, R. C.
- Nicholle, P., and Simons, H., red cell sedimentation rate in the normal guinea-pig, III, 648.
- Nicholls, J. V., section of posterior ciliary arteries in the rabbit, III, 472.
- Nicholls, L., period of gestation of *Loris*, III, 481.
- and Nimalasuriya, A., Bitot's spots in Ceylon, III, 850.
- Nicholls, T. E., heat stroke and allied conditions, III, 937.
- Nichols, M. L., and Schempt, J. M., separation and determination of aluminium and beryllium using tannin, I, 431.
- Nichols, M. S., occurrence, pathological action, and treatment of fluoride waters, I, 584.
- Nichols, R. E., new instrument for automatically recording erythrocyte sedimentation rate and volume percentage of cell and plasma on a single permanent record, III, 550.
- Nichols, R. L., viscosity of lava, I, 498.
- Nicholson, A. J. C. See Parton, H. N.
- Nicholson, D. E. See Hodgson, H. H.
- Nicholson, H. C., and Sobin, S., respiratory effects from the application of cocaine, nicotine, and lobeline to the floor of the fourth ventricle, III, 184.
- Nicholson, J. R. See Miller, C. C.
- Nicholson, T. F., and Archibald, R. M., properties of reducing material in fractions of normal urines. III. Non-fermentable reducing substances in "fasting" urine, III, 487.
- Urquhart, R. W. I., and Selby, D. L., renal function as affected by experimental unilateral kidney lesions. I. Nephrosis due to sodium tartrate, III, 151.
- See also King, E. J.
- Nickel, R., structure of the "tubules" in the hoof of the horse and their functional significance, III, 225.
- Nieloux, M., final titration of ammonia in the micro-Kjeldahl method, III, 440.
- Nico, R., serum-proteins, III, 553.
- See also Sagastume, C. A.
- Nicol, B. M., and Lyall, A., gastric secretions during pathological hypochloræmia, III, 269.
- See also Lyall, A.
- Nicol, C. See Corry, D. C.
- Nicol, E. A. T., brackish-water lochs of Orkney, I, 46.
- Nicol, H., action of carbon dioxide baths on gastric secretion, III, 689.
- and Freedman, B., fatal agranulocytosis after M. & B. 693, III, 1027.
- Nicol, J., Volta contact e.m.f., I, 302.
- Nicol, R. W., aetiology of pregnancy toxæmia, III, 382.
- Nicola, O. F. F. See Bullrich, R. A.
- Nicolaescu, V. See Spacu, G.
- Nicolai, H., absorption of phenol in small intestine, III, 617.
- Nicolai, J. R. See Wibaut, J. P.
- Nicolai, M. F. E., and Weurman, C., properties of chlorophyll multifilms, I, 22.
- Nicolai, P., periodic variations in size of the nuclei of pancreatic cells, III, 644.
- Nicolaiev, V., glial alteration after repeated insulin shock in animals, III, 831.
- Nicolau, S., simple method for staining virus organisms, III, 796.
- Nicolaysen, R., fat and calcium metabolism, III, 173. Carbon dioxide output in non-anæsthetised and anæsthetised rats with rickets, III, 705.
- and Laland, P., curative effect of nicotinic acid and liver in canine black-tongue disease, III, 166.
- Nicolet, B. H., and Shinn, L. A., action of periodic acid on α -amino-alcohols, II, 409.
- Nicolet, M., occurrence of atomic nitrogen in the upper atmosphere, I, 49. Mechanism of excitation of the forbidden lines of oxygen and nitrogen in the spectra of the aurora and the night sky, I, 347.
- See also Swings, P.

- Nicolle, P., types of apnoea produced by morphine in the rabbit under urethane, III, 506.
- Niculescu, M. See Spacu, P.
- Nie, H., diffuse scattering of fast electrons in electron interference photographs, I, 348.
- Nieberle, K., endemic carcinoma of the ethmoid in sheep, III, 917.
- Niedeggen, G., action of coramine in alcohol intoxication, III, 778.
- Niederl, J. B., and Maurmeyer, R. K., sugar-phenol condensations; condensation of *d*-glucose with phenol, II, 336.
- and Niederl, V., simultaneous multiple alkylation of phenols; synthesis of a phenolic coumarone involving the condensation of diethyl ketone with resorcinol, II, 175. Simplified combustion tube filling for micro-determinations of carbon and hydrogen, II, 193. Steric hindrance in ketone-phenol condensations; synthesis of *cycloalkenyl*-phenols and *cycloalkylcoumarans*, II, 416.
- Niederl, V., and Eitingon, M., standard solutions in quantitative organic micro-analysis, II, 193.
- Niederl, V., Nagel, R. H., and Benedetti-Fichler, A. A., quantitative organic elementary micro-analysis without a micro-balance, II, 462.
- See also Hart, W. F., and McGreal, M. E.
- Niederl, V. See McGreal, M. E., and Niederl, J. B.
- Nielsen, A. H., and Nielsen, H. H., 7.4 μ . fundamental vibration of methyl chloride, I, 509.
- Nielsen, H. E. See Lehmann, J.
- Nielsen, H. H., interaction between rotation and oscillation in deuterioformaldehyde, I, 179.
- See also Nielsen, A. H., and Shaffer, W. H.
- Nielsen, J. M., and Raney, R. B., recovery from aphasia in lobectomy, III, 831.
- Nielsen, J. P., Maeser, S., and Jennings, D. S., evidence favouring the existence of the compound hydrogen perselenide, I, 211.
- Nielsen, M., regulation of body temperature during exercise, III, 154.
- See also Asmussen, E., and Bang, O.
- Nielsen, N., and Dresden, D., dependence of respiration of *Aspergillus niger* on temperature, III, 521.
- and Hartelius, V., growth-promoting action of amino-acids. II. Effect of β -alanine on growth of *A. niger*. III. Effect of β -alanine, β -alanylglycine, aspartic acid, glycylaspartic acid, and related substances on yeast. V. Joint action of aneurin and β -alanine as yeast growth-factors in combination with asparagine and glutamic acid, III, 101, 872. Combined effects of aneurin, β -alanine, asparagine, and glutamic acid in promoting the growth of yeast, III, 790.
- Nielsen, N. A., and Trier, M., effects of strophanthin and acetylcholine on the electrocardiogram, III, 931.
- See also Lundsgaard, E.
- Nielsen, W. M., Morgan, J. E., and Morgan, K. Z., Rossi transition curve for small-angle showers, I, 399.
- Nieman, H. A. See Karp, F. L.
- Niemann, C., constitution of secretin, III, 842.
- See also Pauling, L.
- Niendorf, F., determination of urinary histidine, III, 761.
- Nier, A. O., isotopic constitution of mercury and lead, I, 3. Isotopic constitution of (I) uranium, and the half-lives of the uranium isotopes, (II) radiogenic leads, and the measurement of geological time, I, 169.
- and Gulbransen, E. A., variations in relative abundance of the carbon isotopes, I, 231.
- Niessen, K. F. See Verwey, E. J. W.
- Niessling, K., contractility of the endothelial cells of the omentum, III, 348.
- Nieuwenburg, C. J. van, detection and determination of small amounts of metals in organic material, I, 39.
- Nieuwenhuizen, C. L. C. van, Hartog, H. A. P., and Matthijssen, E., four-lead electrocardiogram of angina pectoris, III, 559.
- Niewodniczański, H., and Lipiński, F., "forbidden" lines in the Te I spectrum, I, 166.
- Niggemeyer, H. See Huckel, W.
- Nightingale, D., and Smith, L. I., polymethylbenzenes. XXII. Action of aluminium chloride on aromatic hydrocarbons. I. 1:3-Dimethyl-4-butylbenzenes [4-butyl-*m*-xylenes], II, 103.
- and Taylor, R. G., phenyl alkyl nitrogen substitution; reactivity in the barbituric acid series, II, 344.
- Nightingale, G. T. See Blake, M. A.
- Nijboer, B. R. A., theory of electronic semiconductors, I, 453.
- Nijveld, H. See MacGillivray, C. H.
- Nijveld, W. J., and Brienne, J. G., vitamin-E, III, 169.
- Niketic, B., and Susic, Z., cerebrospinal fluid (c.s.f.) during convulsions due to cardiazol, III, 35.
- Nikiforov, A. J., theory of the mercury-vapour lamp, I, 405.
- Nikiforov, E. A., adsorption on polycrystalline bodies, I, 414.
- Nikitin, B. A., chemistry of the "inert" gases. II. Hydrates of argon and neon. III. Chemical methods of separation of "inert" gases from their mixtures, I, 621.
- Nikitin, E. K., and Abramova, M. A., velocity of reaction of aldehydes with ammonia. I. Reaction of furfuraldehyde with ammonia, II, 556.
- and Egorova, M. E., iodometric determination of acetone by a turbidimetric method, II, 194.
- Nikitin, L. V., electrode potentials of metals subjected to mechanical deformation. I., I, 613.
- Nikitin, N. I. See Orlova, I. M., and Rudneva, T. I.
- Nikitin, S. A., biological action of X-rays, III, 514.
- Nikitin, S. J. See Aliehanian, A. I.
- Nikitin, V. I., isomeric changes in cyclic hydrocarbons observed when trying to realise a triple linking in a ring, II, 307.
- Nikitina, E. A., composition and properties of silicomolybdic acid, I, 92.
- See also Kurnakov, N. S.
- Nikitina, E. I., determination of cadmium, I, 39.
- Nikitine, S., theoretical considerations on the sign of photodichroism, I, 209. Absorption anisotropy of different radiations for the molecules of several photosensitive colouring matters, I, 239. Transverse photodichroism, I, 272.
- Niklas, F., alkaline earths and coagulation, III, 742.
- Nikliborc, J., mechanism of the diffusion of hydrogen through mercury, I, 137.
- Nikolaev, A. V., study of stereoisomerism and isomerisation of complex platinum compounds by the method of heating curves; enlarging crystals of metallic platinum, I, 275. Physicochemical investigation of borates, I, 285.
- See also Kurnakov, N. S., and Nazarov, V. I.
- Nikolaev, V. I., and Kalinin, S. K., strontium as a chemical indicator [of the origin of natural brines], I, 225.
- and Rudenko, E. I., adsorptive properties of clay (kaolin), I, 254.
- and Salischtscheva, N. E., Lake Mosher, I, 225.
- See also Stepanov, B. I.
- Nikolaeva, A. F., and Putschkov, P. V., hydr[o]genlation of aromatic hydrocarbons by Skita's method, I, 271. Hydrogenation of hexene under high pressure, II, 354.
- See also Putschkov, P. V.
- Nikolaeva, N. V. See Smorodincev, I. A.
- Nikolaevskaja, N. N. See Bak, M. A.
- Nikolin, V. I., and Levschuk, I. J., magnetic suspension method, I, 44.
- Nikolski, K., problem of mass of an elementary particle, I, 594.
- Nikonova, V. V. See Maximov, V. I.
- Nikuni, Z., constitution of α -sorigenin, II, 264. Distribution of α -sorigenin and α -sorigenin, III, 537.
- Nikurashin, A. I., reaction of zinc salts with alkalis, I, 331.
- Nilakantam, P., and Jayaraman, N., Jones reductor, I, 493.
- Nilsson, B. See Jensen, Einar.
- Nilsson, G., characteristic reaction of dithioamide with ferrous iron, II, 410.
- Nilsson, R., Bjälve, G., and Burström, D., biotin as a growth factor for *Bact. radiclecola*, III, 792.
- See also Bjälve, G.
- Nimalasuriya, A. See Nicholls, L.
- Nims, L. F. See De Barenne, J. G. D., and Marshall, C.
- Nininger, H. H., composition of meteorites, I, 46.
- Nisbet, H. B. See Levvy, G. A.
- Nishi, T. See Nakamura, H.
- Nishida, Kenzo, changes in the uterine mucosa and ovaries of dogs during oestrus, induced by pregnancy urine, III, 58.
- Nishida, M. See Okamoto, K.
- Nishikawa, S., Nakaidzumi, M., and Motida, N., absolute determination of r. unit, III, 784.
- Nishikawa, T., Okuno, T., Maeda, Midori, and Ogata, Y., ocean water from various parts of the world, I, 434.
- Nishimori, T. See Matsuda, R.
- Nishimura, M., composition of gall stones, III, 150.
- Nishina, Y., and Nakayama, H., absorption and translocation of sodium in the plant, III, 435.
- Takeuchi, M., and Ichimiya, T., mass of the mesotron, I, 292.
- Yasaki, T., Ezoe, H., Kimura, K., and Ikawa, M., fission of thorium by neutrons, I, 592.
- Yasaki, T., Kimura, M., and Ikawa, M., artificial production of uranium-Y from thorium, I, 54.
- Nishinarita, F. See Kawamura, R.

- Nishioeda, *N.* See Yamafuji, *K.*
 Nishiyama, *S.* See Kodama, *T.*
 Nishizawa, *K.*, laminarin and mannitol of brown algae. I. Diurnal variation of their content in *Eisenia bicyclis*, III, 216.
 See also Amagasa, *M.*
 Nishizawa, *T.* See Ochiai, *E.*
 Nishizawa, *Y.* See Kasahara, *M.*
 Nisovkina, *T. V.* See Moldavski, *B. L.*
 Nissan, *A. H.*, Dunstan's law, I, 604.
 and Clark, *L. V. W.*, viscosity of liquids, I, 411.
 Wood, *C. E.*, Clark, *L. V. W.*, and Nash, *A. W.*, application of physico-chemical principles to the investigation of the properties of rocks. III. Porosity: comparison of methods and conclusions, I, 46.
 Nissen, *N. I.*, scrotherapeutic studies on lobar pneumonia, especially treatment with rabbit antipneumococcus serum, III, 611.
 Nitschmann, *H.*, guiding of reactions by nuclei; oxidation of iron in ferrous sulphate solution, I, 92.
 Nitta, *I.*, and Watanabe, *Tokunosuke*, electron density and interatomic distances in tetragonal pentaerythritol, I, 245.
 Nitta, *Y.*, nutritive value of incomplete albumin (buckwheat albumin): influence on ovarian function, III, 161.
 Nitti, *F.*, and Bovet, *D.*, activity of *p*-aminobenzenesulphonamide (F. 1162) on septicemia produced by hemolytic streptococci; rôle of number of organisms injected, III, 998.
 Bovet, *D.*, Tréfouel, *J.*, and Tréfouel, (*Mme.*) *J.*, effect of new derivatives on streptococci and pneumococci, III, 503.
 Philippe, *M.*, and Bovet, *D.*, retarding action of organic sulphur derivatives on the growth of the diphtheria bacillus, III, 875.
 See also Bovet, *D.*, and Tréfouel, *J.*
 Nittis, *S.*, nature and mechanism of staining of the erythrocytic reticulum, III, 115.
 Nitzsche, *S.* See Gleu, *K.*
 Nitzulescu, *J.*, ætiology of pellagra, III, 495.
 See also Ballif, *L.*, and Slatineanu, *A.*
 Nive, *E. O.*, Weisz, *S.*, and Harris, *T. H.*, insulin-hypoglycemia treatment of schizophrenia, III, 672.
 Niven, *J. C.*, sulphaniilamide in treatment of malaria, III, 177.
 Nivet, *M.*, persistent effects of electrotonus on the excitability of nerve, III, 900.
 Niwa, *K.*, vapour pressure of solid salts. II. Vapour pressure of alkali halides and thermodynamic calculations, I, 311.
 See also Shibata, *Z.*
 Nix, *F. C.*, vacuum furnace for production of single crystals of metals and alloys, I, 103.
 See also Steigman, *J.*
 Nixon, *A.* See Sahyun, *M.*
 Nixon, *E. N.* See Rogoff, *J. M.*
 Nizovkina, *T. V.* See Nemtsov, *M. S.*
 Nizzi-Nuti, *G.*, structural changes in the hypophysis in old age, III, 136.
 Njegovan, *V.*, and Marjanović, *V.*, quantitative precipitations at extreme concentrations. VI., I, 487.
 Nobécourt, *P.*, survival and growth of vegetable tissue cultures, III, 1015.
 Nobile, *F.* See Uhlmann, *F.*
 Noble, *A.*, and Cameron, *B. C.*, specificity of pneumococcus types by "Quellung" and agglutination reactions, III, 525.
 Noble, *I.* See Roberts, *L. J.*
 Noble, *R. L.*, functional impairment of anterior pituitary gland produced by synthetic oestrogenic substance 4:4'-dihydroxy- α - β -diethylstilbene, III, 57.
 Rinderknecht, *H.*, and Williams, *P. C.*, apparent augmentation of pituitary antidiuretic action by various retarding substances, III, 907.
 Rowlands, *I. W.*, Warwick, *M. H.*, and Williams, *P. C.*, comparative effects of certain gonadotropic extracts on ovaries of normal and hypophysectomised rats, III, 1054.
 See also Campbell, *N. R.*, Dodds, *E. C.*, Liu, *S. H.*, and Rinderknecht, *H.*
 Nobuga, *P.* See Cardoso, *D. M.*
 Nobuoka, *N.*, influence of ultra-short waves on the growth of rabbit sarcoma, III, 98.
 Influence of ultra-short waves on malignant tumours. III. Histological investigation of influence of repeated doses on rabbit sarcoma, III, 598.
 Nocken, *H.* See Koll, *W.*
 Noekolds, *S. R.*, petrology of Barnavavo, Carlingford, I.F.S. III. Hybrids from the E. and S.E. slopes of Barnavavo Mountain, I, 110.
 Noda, *J.* See Sakurai, *T.*
 Noda, *K.*, endemic goitre in Manchukuo and its relation to iodine of soil, III, 908.
 See also Ochiai, *E.*
 Noda, *Y.*, effect of oral administration of drugs containing tannic acid on blood coagulation, III, 714.
 Noddack, *I.*, products of irradiation of uranium with neutrons, I, 295.
 Nöcker, *P. A.* See Bergstermann, *H.*
 Noël, *R.*, modifications of elements of splenic reticulum in familial hemolytic jaundice, III, 808.
 See also Martin, *J. F.*
 Nørgaard, *F.*, and Tobiassen, *E. S.*, two cases of endogenous pellagra developing after stomach operation and during the course of pernicious anemia, III, 402.
 See also Petri, *S.*
 Noether, *H.* See Frieshaeva, *N. A.*
 Noetzel, *H.*, morphological changes from vitamin-A over-dosage, III, 918.
 Noetzel, *O.*, case of silicosis, III, 316.
 Noetzelin, *J.*, volcanic phenomena and nuclear chemistry, I, 392, 397.
 Nogaideli, *A. I.* See Salkind, *J. S.*
 Nogami, *M.*, elastic collisions of protons and very fast neutrons, I, 546.
 Nogami, *T.*, mitochondria, metachondria, and Golgi's apparatus of epithelial cells of air vesicles and bronchioles of lungs, III, 808.
 Nogarède, *F.* See Dautrebande, *L.*
 Nogoraze, *D.* See Jahiel, *R.*
 Noguchi, *K.* See Shibata, *Y.*
 Noguchi, *T.*, and Kawanami, *M.*, chemical constituents of Umbelliferae. VII. Constituents of the root of *Angelica glabra*, Makino. III., II, 225.
 Noiseux, *P. J.* See Balado, *M.*
 Nolan, *J. J.*, and Nolan, *P. J.*, diffusion and fall of atmospheric condensation nuclei, I, 140.
 Nolan, *P. J.* See Nolan, *J. J.*
 Nolf, *P.*, coagulation of the blood, III, 230.
 Intrinsic elements of nerve ring of gizzard of the granivorous bird, III, 592.
 Noll, *C. I.* See Kriebel, *V. K.*, and Whitmore, *F. C.*
 Noll, *W.*, mineralogical analysis of clay, I, 438.
 Noller, *C. R.*, saponins and sapogenins. XIII. Precipitability of steroid sapogenins by digitonin, II, 546.
 Goodson, *L. H.*, and Synerholm, *M.*, saponins and sapogenins. X. Isolation of gitogenin from *Chlorogalum pomeridianum*, III, 951.
 See also Goodson, *L. H.*, Jones, *R. N.*, and White, *W. R.*
 Nolte, *A. J.*, and Loesecke, *H. W. von*, characteristics and composition of water-melon seed oil (Cuban Queen variety), III, 733.
 Noltie, *H. R.*, effect of pontine trans-section on blood-sugar level of the decerebrated fasting cat, III, 408.
 Nomland, *R.*, Skolnik, *E. A.*, and McLellan, *L. L.*, jaundice from bismuth compounds used in the therapy of syphilis, III, 89.
 Nonnenbruch, *W.*, hepatorenal syndrome and hypostenuria, III, 844. Fruit and vegetable diet and mineral salt metabolism, III, 917.
 Noojin, *R. O.* See Teague, *R. S.*
 Noonan, *E.*, and La Mer, *V. K.*, thermodynamics of strong electrolytes in protium oxide-deuterium oxide mixtures. I. Hydrogen chloride, I, 199.
 See also La Mer, *V. K.*
 Noorden, *C. von*, adaptation and nutrition, III, 700.
 Norcross, *N. C.*, intracerebral blood flow, III, 250.
 Nordbo, *R.*, ionisation of magnesium citrate, I, 262. Jena glass filter test-tubes for micro-analysis, I, 341. Determination of magnesium level in serum ultrafiltrate, III, 555. Determination of magnesium by the oxine [8-hydroxyquinoline] method in serum ultrafiltrate and milk centrifugate, III, 639. Concentration of ionised magnesium and calcium in milk, III, 844. Determination of calcium ions in the ultrafiltrate from biological fluids, III, 886.
 Nordenskjöld, *T.* See Sjogren, *B.*
 Nordenson, *N. G.*, reticulo-endothelial cells of bone marrow and formation of monocytes in man, III, 958.
 Nordheim, *G.* See Sporer, *H.*
 Nordheim, *L. W.*, energy losses of high-energy particles, I, 5. Lifetime of the Yukawa particle, I, 236. Production of the hard component of cosmic radiation. II. Protons or neutral particles as primaries, I, 593.
 and Hebb, *M. H.*, production of the hard component of cosmic radiation. I. Photon hypothesis, I, 593.
 Nordlow, *W.* See Gjertz, *A.*
 Nordmann, *J.*, histogenesis of the lens, III, 37.
 and Reiss, *P.*, physico-chemical problems of the opacification of the lens, III, 835.
 Nordmann, *M.*, occupational carcinoma of the asbestos worker, III, 95.
 Nordsieck, *H. H.* See Hoard, *J. L.*
 Nordstrom, *L.* See Spengler, *O.*
 Nordstrom, *T.*, hydrochloric acid secretion in scorbutic guinea-pigs, III, 841.
 Norén, *S.*, functional adaptation of muscles after fracture of humerus in a dog, III, 244.

- Noriega del Aguila, *M.*, sterols in Peruvian guano, III, 270. Physico-chemical constants of immune sera, III, 634. Colorimetric reactions and flocculation of sera, III, 795.
- Norinder, *E.*, spectrographic determination of calcium, potassium, sodium, and magnesium in small amounts of serum, III, 555.
- Norkus, *M. G.* See Zwemer, *R. L.*
- Norling, *F.*, coincidence measurements with α - and β -rays from radioactive arsenic, I, 115. Coupling of β - and γ -rays of radio-manganese and the energy levels of the stable iron nucleus, I, 505.
- Norman, *A. G.*, determination of uronic groups in polysaccharides, II, 195. See also Watson, *D. J.*
- Normand, *A. R.* See Kasbekar, *G. S.*
- Norrie, *M.* See Lemberg, *R.*
- Norris, *A.* See Hammick, *D. L.*, and Jenkins, *G. I.*
- Norris, *C. H.*, tension at surface, and other physical properties of nucleated erythrocyte, III, 1026.
- Norris, *E. H.*, morphogenesis and histogenesis of the thymus gland in man; origin of the Hassall corpuscles, III, 39.
- Beard, *A. H.*, and Gerber, *L. S.*, atrophy of the pancreas with extreme fatty metamorphosis of the liver and steatorrhea, III, 148.
- Norris, *J. P.*, and Rubinstein, *D.*, formation of intermediate compounds in hydrocarbon syntheses by the Friedel and Crafts reaction; preparation of α -trialkylbenzenes, II, 305.
- and Sturgis, *B. M.*, condensation of alcohols, ethers, and esters with aromatic hydrocarbons in the presence of aluminium chloride, II, 372.
- and Turner, *H. S.*, rearrangement of toluene derivatives by aluminium chloride, II, 497.
- and Vaala, *G. T.*, rearrangement of the xylenes by aluminium chloride, II, 497.
- and Ware, *V. W.*, reactivity of atoms and groups in organic compounds. XIX. Relative reactivities of the chlorine atoms in derivatives of benzoyl chloride, II, 369.
- Norris, *L. C.* See Bauernfeind, *J. C.*, Caskey, *C. D.*, Davis, *H. J.*, and Wilgns, *H. S., jun.*
- Norris, *R. O.*, Verbanc, *J. J.*, and Hennion, *G. F.*, α,γ -trialkoxylbutanes, II, 240.
- Vogt, *R. R.*, and Hennion, *G. F.*, substituted acetylenes and their derivatives. XXXIII. Halogenation in reactive solvents. IV. Chlorination of Δ -hexinene in reactive solvents, II, 400.
- Norrish, *R. G. W.*, relationship of fluorescence to photolysis in gaseous systems, I, 125.
- and Brookman, *E. F.*, mechanism of polymerisation reactions. I. Polymerisation of styrene and methyl methacrylate, I, 479.
- and Dainton, *F. S.*, reaction between hydrogen and oxygen sensitised by nitrogen peroxide, I, 477. See also Buckler, *E. J.*
- Northey, *E. H.* See Crossley, *M. L.*
- Northrop, *J. H.*, changes in protein content of bacterial suspensions during lysis and autolysis, III, 205. Increase in bacteriophage and gelatinase concentration in cultures of *Bacillus megatherium*, III, 1014. Crystalline enzymes; chemistry of pepsin, trypsin, and bacteriophage, III, 1114.
- Northup, *D.*, Hawk, *F. L.*, and Andes, *J. E.*, photo-electric determination of blood-non-protein-nitrogen, -urea, -creatinine, -creatinine, guanidine, and -amino-acids, III, 356.
- and Van Liere, *E. J.*, effect of anoxamia on absorption of magnesium sulphate from small intestine, III, 986. See also Andes, *J. E.*, and Van Liere, *E. J.*
- Norton, *A.* See Bowen, *E. J.*
- Norton, *F. H.*, hydrothermal formation of clay minerals in the laboratory, I, 345.
- Norton, *F. J.*, influence of frequency on electro-optical effect in colloids, I, 318.
- Nosik, *W. A.* See Gardner, *W. J.*
- Noth, *P. H.*, Essex, *H. E.*, and Barnes, *A. R.*, effect of acetylcholine on electrocardiogram of the dog, III, 895.
- Nothhaas, *R.*, pathogenesis of gastric and duodenal ulcer, III, 62.
- Notthohm, *F. E.*, and Mayer, *F.*, determination of the bitter substance in blue lupins, III, 343.
- Nottes, *G.*, universal apparatus for extraction and distillation, I, 106.
- Nottingham, *W. B.*, electrical and luminescence properties of willemite screen material, I, 43. Ionisation and excitation in mercury vapour produced by electron bombardment, I, 168. Electrical and luminescent properties of phosphors under electron bombardment, I, 180.
- Nouvel, *J.* See Urbain, *A.*
- Nouye, *K.*, biological action of radium emanation, III, 717.
- Nova, See Enselman.
- Nova, *M. A.* See Piéry, *M.*
- Novac, *L.* See Radulescu, *D.*
- Nováček, *R.*, identity of dakeite and schroeckingerite, I, 587. See also Steinocher, *V.*
- Novak, *E.*, clinical employment of female sex hormones, III, 1052.
- and Gray, *L. A.*, disgerminoma of the ovary, III, 56.
- Novak, *J. B.*, and Kruglick, *J. S.*, anamnestic reaction of tuberculin, III, 1104.
- Novak, *M.*, use of bacteriostatic drugs in preservation of blood for transfusion, 1028.
- and Hall, *H.*, determining efficiency of preoperative skin sterilisation, III, 775.
- Novel, *E.*, staining of bacterial flagella, III, 1107.
- Novelli, *A.*, [preparation of] *sec.* amines by the Leuckart synthesis, II, 143.
- Noverraz, *M.* See Gigon, *A.*
- Novey, *M. A.*, and Goodhand, *C. L.*, hyperemesis gravidarum, III, 481.
- Novikova, *S. I.* See Gulik, *M. F.*
- Novikova-Minasch, *O. V.* See Larionov, *J.*
- Novodranov, *J. K.*, adsorption by aluminium, iron, and magnesium hydroxide gels of ethyl alcohol, water, and benzene vapours, I, 253.
- Novoselova, *A. V.*, and Averkova, *M. J.*, equilibria in the system $\text{NH}_4\text{F}-\text{BeF}_2-\text{H}_2\text{O}$ at 0° , I, 612.
- Bodaleva, *N. V.*, and Gershtein, *M. M.*, equilibria in the system $\text{BeSO}_4-\text{CuSO}_4-\text{H}_2\text{O}$, I, 81.
- and Levina, *M. E.*, dissociation pressure of beryllium sulphate hydrates, I, 264.
- Novoshenova, *L. N.* See Schlesinger, *N. A.*
- Nowacki, *W.*, crystal structure of scandium trifluoride, I, 64. Classification of solids, I, 129. Crystal structure of cubic yttrium fluoride, YF_3 , I, 305.
- Nowak, *S. J. G.*, carotid and aortic reflexes in adrenalectomised animals, III, 21. Action on the carotid sinus of evipan, picroton, sodium amylal, and avertin, III, 87.
- and Downing, *V.*, oxygen and carbon dioxide changes in arterial and venous blood in experimental spinal anaesthesia; choice of basal anaesthetics for blood-gas studies, III, 87.
- and Walker, *I. J.*, experimental hypertension, III, 560. See also Brouha, *L.*
- Nowakowski, *H.* See Hinsberg, *K.*
- Nowatke, *W.*, dialysis through cellulose membranes, I, 282.
- Nowinski, *W. W.*, intermediary carbohydrate metabolism in amphibia. I. Carbohydrate breakdown [in tadpoles] before metamorphosis, III, 772.
- Nowotny, *P.* See Molinski, *S.*
- Nowotny, *H.*, and Henglein, *E.*, structure of $\text{OsO}_4\text{C}_2\text{Me}_6$, I, 244.
- and Mohrheim, *A.*, crystal structure of Al_2Ca , I, 456. See also Kratky, *O.*, and Markstein, *G.*
- Noyan, *A.*, pernicious anaemia and nervous system complications, III, 252.
- Noyce, *W. K.* See Upson, *F. W.*
- Noyes, *W. A., jun.*, and Henriques, *F. C., jun.*, fluorescence and photochemical kinetics of polyatomic molecules in the gas phase, I, 550. See also Ellis, *V. R.*
- Noyons, *A. K. M.*, polyfilar diaferometer for micro-metabolism, III, 221.
- and Fischer, *F. P.*, chronaxie of the blink reflex, III, 465. See also Jongbloed, *J.*
- Noyons, *E. C.*, iodometric determination of small quantities of glucose, II, 133. Determination of creatinine and creatine. I. In urine. II. Creatinine in blood, III, 392, 817. Determination of sodium in serum, III, 556. See also Meuwissen, *T.*
- Nozaki, *K.* See Young, *W. G.*
- Nürnberg, *W.*, physical exercise and heart hypertrophy, III, 456.
- Nürnberg, *L.*, treatment of disturbances of menstruation with female sex hormone, III, 756.
- Numata, *I.* See Fujita, *A.*
- Nungester, *W. J.* See Kempf, *J. E.*
- Nunn, *L. C. A.*, and Maclean, *I. S.*, fatty acids stored by the liver in the fat-deficiency disease of rats, III, 173. See also Hume, *E. M.*
- Nurse, *T. J.* See Vernon, *W. H. J.*
- Nutini, *L. G.* See Cook, *E. S.*
- Nutman, *P. S.*, vernalisation of cereals. VI. Anatomical and cytological evidence for formation of growth-promoting substances in developing rye grain, III, 1017.
- Nutting, *G. C.*, and Harkins, *W. D.*, pressure-area relations of fatty acid and alcohol monolayers, I, 367. Pressure-area and pressure-temperature relations of expanded monolayers of myristic and pentadecic acids, I, 520. See also Harkins, *W. D.*
- Nutting, *P. G.*, hydrosols and electrolytic ions, I, 261.
- Nyberg, *P.*, cardiazol in schizophrenia, III, 249. Action of cardiazol fits on brain and heart of rabbits, III, 572.
- Nydahl, *F.*, determination of copper in hay by the diethyldithiocarbamate method, I, 386.

- Nygaard, K. K., photo-electric recording of coagulability of blood, III, 353.
and Guthe, T., automatic recording of the Wassermann reaction by a photo-electric principle (photograph), III, 430.
See also Guthe, T.
- Nyka, W. See Loiseleur, J.
- Nylin, G., and Sallstrom, T., three synchronised leads between fixed points on the heart projection on the chest wall, III, 16.
See also Liljestrand, G.
- Nyman, G. A., *epi-isofenchone*, II, 121.
and Elomaa, E., [reactions of] 8-fenchene-3-carboxylic acid, II, 435.
and Kuvaja, A. M., *epicamphor* series; new fenchene homologues and 4-methylisofenchone, II, 220.
See also Komppa, G.
- O.
- Oag, R. K., growth of *Borrelia duttoni* in developing egg, III, 1011.
See also Anderson, C. G.
- Oakwood, T. S. See Marker, R. E.
- Oana, S., volcanoes of Japan. XVIII. Density measurements on the waters obtained by condensing the vapours emitted from fumaroles, I, 540.
- Oastler, E. G., and Anderson, A. B., ketosis in hypophysectomised rats, III, 855.
- Oatley, C. W., adsorption of oxygen and hydrogen on platinum and removal of these gases by positive-ion bombardment, I, 253.
- Obaton, F., effect of colchicine on development of *Photobacterium phosphoreum*, III, 727.
- Oberdisse, K., specific dynamic action and denaturation of amino-acids, III, 499.
and Roda, E., seat of action of thyroid hormone, III, 1048.
- Obergard, I. A., Ljubin, B. O., and Tschuliatikova, A. J., micro-method for determination of reducing sugars, II, 133.
and Saltikov, G. S., interaction of blood-serum colloids with aluminium chloride, III, 421.
- Oberling, C., and Guérin, M., tumour production by intradermal inoculation of chicken leukaemia virus, III, 490. Immunisation by intracutaneous inoculation of chicken leukaemia virus, III, 490.
- Guérin, P., and Guérin, M., production of a hepatic tumour by 3:4-benzpyrene in rats, III, 696.
- Guérin, P., Guérin, M., and Sannié, C., effect of the solvent on carcinogenic power of 3:4-benzpyrene, III, 492. Relation between apparent hypophyseal tumours and benzpyrene injections in the rat, III, 1044.
- Obermayer, M. E., and Becker, S. W., ammonium succinimidoaurate, a gold compound of low toxicity, III, 82.
See also Becker, S. W.
- Oberst, F. W., determination of morphine in urine of morphine addicts, III, 191.
- Obert, L., and Bearden, J. A., effect of chemical combination on K fluorescent X-ray emission lines, I, 113.
- Obrebski, S. See Jablczynski, K.
- O'Brien, A. S. See Kolthoff, I. M.
- O'Brien, B., application of isodensity contouring methods to spectrum photometry, I, 491.
See also Morgareidge, K.
- O'Brien, E. J., and McCarthy, C. J., staphylococcal septicaemia treated with M. & B. 693, III, 179.
- O'Brien, H. D. See Martin, C. P.
- O'Brien, S. J., and Kenny, C. L., hydrolysis of a salt derived from a weak acid and a weak base, I, 419.
Kenny, C. L., and Zuercher, R. A., partial pressure of hydrogen chloride from its solutions in ethylene glycol and other solvents at 25°, I, 564.
- O'Brochta, J., and Lowy, A., thio-compounds derived from *o*-aroylbenzoic acids, II, 559.
- Obst, H. See Karrer, P.
- Ochipinti, G., and Anzalone, S., encephalometry of Sicilians and Sardinians, III, 1023.
- Ochiuto, A., statistical study of pulse rates of male Italians, III, 457.
- Ochi, S., hormones of stomach and intestine, III, 689.
- Ochiai, E., polarisation in heterocyclic rings with aromatic character. I, II, 446.
and Itikawa, Z., action of Grignard's reagent on the carbethoxy side-chain of halogenated [ethyl] pyrimidine-[acetates], II, 451.
and Kuroyanagi, S., molecular compounds of carbamido derivatives. I, II, 363.
and Miyaki, H., 2:5-naphthyridine derivatives. II, II, 452.
and Nagasawa, F., polarisation in heterocyclic rings of aromatic character. II. Thiazole ring, II, 454. Substitution of thiazole, II, 455.
and Nakamura, Toshiharu, substitution in the aromatic ring of morphine alkaloids, II, 291.
and Noda, K., constitution of matrine. XXI. Curtius degradation of methyl methylmatrate, II, 460.
and Shimizu, M., preparation of derivatives of the higher fatty acids, II, 404.
Wada, Masao, Suzuki, M., and Nishizawa, T., 1-aminoindolizine derivatives, II, 452.
and Yanai, M., polarisation in heterocyclic rings with aromatic character. III. Polarisation of the pyrimidine ring, II, 451. Condensation of 2:4:6-trimethylpyrimidine and benzaldehyde. II, II, 452.
- Ochoa, S., enzymic synthesis of cocarboxylase in animal tissues, III, 940.
and Peters, R. A., quantitative measurement of vitamin-B₁ and its phosphoric esters, and their synthesis in animal tissues, III, 74.
See also Banga, I., and Long, C.
- Ochrimenko, I. P. See Palladin, A. V.
- Ochs, I. See Abramson, H. A.
- Ochs, (Mlle.) L. See De Ficquelmont, A. M.
- Ochsner, A., and DeBailey, M., peripheral vascular disease, III, 562. Treatment of thrombophlebitis by novocain block of sympathetics, III, 660.
- Ockenden, F. E. J., effect of tube-length on the visibility of dust particles with an oil-immersion objective, I, 626.
- O'Connell, C. P. See Kurzrote, R.
- O'Connell, S. See Coburn, A. F.
- O'Connor, P. See Logan, M. A.
- O'Connor, R. C. See Florey, H. W.
- O'Connor, R. J., experiments on development of the pronephric duct, III, 112. Experiments on development of amphibian mesonephros, III, 1022.
- O'Connor, S. F., Baldinger, L. H., Vogt, R. R., and Hennion, G. F., solvent effects in addition reactions. I. Addition of hydrogen bromide and chloride to cyclohexene and Δ^2 -hexene, I, 476.
- O'Connor, W. J. See Eccles, J. C.
- Odani, S. See Kubo, I.
- Oddo, B., pyrrole-indole group. Series II. XXIV. Mechanism of transformation of the pyrrole into the pyridine ring, II, 283.
and Cambieri, (Signa.) F., pyrrole-indole group. Series II. XXV. Syntheses by means of magnesylindoles; tryptophol and 2-methyltryptophol, II, 283.
- Odel, H. M., arteriolar changes in the myocardium in diffuse arteriolar disease with hypertension, group IV., III, 658.
- Odgers, P. N. B., development of atrio-ventricular valves in man, III, 1022.
- Oding, O. V., printing of millimetre squares on metal surfaces, I, 45.
- O'Donnell, R. W. H., Robertson, A., and Harland, J. C., picrotoxin. IV., II, 486.
- O'Donovan, D. K., and Collip, J. B., specific metabolic principle of the pituitary, and its relation to the melanophore hormone, III, 258.
See also Billingsley, L. W., and Rabinowitch, I. M.
- O'Dwyer, M. H., hemicelluloses of wood of English oak. IV. Structure of hemicellulose-A, III, 734.
- Oehsln, C. See Mayer, R. L.
- Odman, O. H., late gold and its implications, I, 288.
- Oehme, C., "basal metabolism." I. "Basal metabolism" and amino-acids, III, 924.
See also Hoen, E.
- Ohnell, R., intestinal absorption in the perfused mammalian intestine, III, 593.
and Hofer, R., effect of various poisons on absorption of sugars and other non-electrolytes from normal and isolated artificially perfused intestine, III, 593.
- Ohlm, L. W., diffusion of iron salts in aqueous solution, I, 250.
- Oelkers, H. A., liver damage and alcohol metabolism, III, 92. Effect of arsenic and antimony compounds on [blood-] sugar, III, 818.
- Oelrichs, L. See Bieling, R.
- Orskov, S. L. See Bang, O., Henriques, V., and Lundsgaard, E.
- Orstrom, A., Orstrom, M., and Krebs, H. A., hypoxanthine formation in pigeon liver, III, 758.
See also Krebs, H. A.
- Orstrom, M. See Orstrom, A.
- Ortenblad, B. See Myrback, K.
- Oesper, R. E., Berthold Schwarz, I, 583.
and Deasy, (Miss) C. L., preparation of lead tetra-acetate, II, 241.
- Oester, Y. T., and Maaske, C. A., quinine: effects on normal and denervated skeletal muscle and on the acetylcholine and physostigmine actions on skeletal muscle, III, 860.
- Oesterle, P., gas-producing aerobic spore-forming bacteria surviving after sterilisation, III, 880.
- Oesterlen, F. See Baukloh, W.
- Oesterlin, E., antiviral *in vitro* and *in vivo*, III, 209.

- Oesterlin, M. See Bock, E.
- Oesting, R. B., colorimetric assay of urinary androgens, III, 53.
- Oestreicher, A. See Fischer, Hans.
- Oetken, H., use of uferon in meningococcal meningitis and pneumococcal empyema, III, 179.
- Oettel, H., step-photometric carbon monoxide-haemoglobin determination, III, 933.
- Oz, T. V., gonococcus toxin and antitoxin, III, 875.
- Offenkrantz, F. M., serum-cholesterol in patients with rheumatic fever, III, 1029.
- Offutt, E. B. See McHargue, J. S.
- Ofitserov, V. N. See Brodovitsch, L. A.
- Ogata, A., Hirano, Shiro, and Kon, T., male sex hormones. VIII. Activators of male hormones. I, II, 356.
- Hirano, Shiro, and Sato, T., constituents of *Sympetrum*, III, 950.
- and Kawakami, I., hormones related to sterols. I. 7-Keto- Δ^5 -androstene-3:17-diol diacetate, II, 378.
- and Mori, F., constituent of the earthworm as an antipyretic. I, III, 845.
- and Tanaka, T., physiological action of di-iodotyrosine, III, 1049.
- Ogata, D., Morita, I., and Takai, T., influence of brain on lymphatic heart, III, 964.
- Ogata, K. See Asada, T.
- Ogata, S. See Kasahara, M.
- Ogata, T., and Maruyama, S., cyanine dyes; reaction of cyclic ammonium salts and indene, II, 40.
- Ogata, Y. See Nishikawa, T.
- Ogawa, H., vena facialis anterior and vena temporalis superficialis and vena auricularis posterior of Japanese twin embryos, III, 1022.
- Ogawa, M., glutathione. VI. Effect of heat on yeast glutathione. VIII. Determination in tissues by method of Okuda and Ogawa and the modified method of Fujita and Numata. IX. Effect on fever, III, 200, 539, 611.
- Ogden, E., Shock, N. W., and Heck, K., stabilisation of systolic blood pressure in supine posture, III, 660.
- See also Shock, N. W.
- Ogg, E. F., hydrogen-bromine reaction under influence of α -particles from radon, I, 331.
- Ogg, R. A., jun., carbonium ions and the hydrolysis of alkyl halides, I, 527.
- and Priest, W. J., kinetics of the vapour-phase reaction of cyclopropane with iodine, I, 615.
- Oggioni, G., Donaggio's neuro-fibrils in experimental insomnia, III, 128. Characteristics of graphs of reflex phenomena in Parkinsonian encephalitis, III, 129. Effect of pH on Donaggio's reaction, III, 470.
- Ogihara, G. See Kubo, H.
- Ogle, K. N., induced size effect. II. Experimental study of the phenomena with restricted fusion stimuli, III, 838.
- Ogrins, B. See Straumanis, M.
- Ohara, Y. See Nakatani, M.
- O'Hare, J. P. See Harris, A. W., and Massie, E.
- Ohl, E. N. See Lamb, A. B.
- Ohle, H., Euler, E., and Voullieme, R., syntheses with 5:6-anhydroisopropylideneglucose. VII. Glucose 6-phenyl ether, II, 7.
- Ohle, H., and Schultz, C. A., acetone [isopropylidene] derivatives of the sugars and their transformations. XXI. Transformation of 1:2-isopropylidene- β -D-fructose into 3-methyl-D-sorbose; stereochemistry of the ethylene oxides, II, 9.
- and Willeke, H. [with Tessmar, K.], acetone [isopropylidene] derivatives of the sugars and their transformations. XXII. Conversion of isopropylideneglucose into 3:6-anhydroglucose; stereochemistry of ethylene oxides, II, 8.
- See also Mahr, C.
- Ohle, W., hydrochemical analysis. III. Determination of phosphorus, I, 97.
- Clay pool containing sulphuric acid at Reinbeck, I, 495.
- Ohlmeyer, P., cozymase as the hydrogen- and phosphate-carrying co-enzyme of fermentation, III, 788.
- Ohm, J., miners' nystagmus, III, 834.
- Ohmaki, See under Omaki.
- Ohno, See under Ono.
- Ohri, G. L. See Bhatnagar, S. S.
- Ohsako, See under Osako.
- Ohta, K., tetrahydroxynorsterocholanic acid from the bile of the "gigi" fish (*Pelteobagrus nudiceps*), II, 371. Action of cholic acid on the acetone content of blood and urine, III, 65. Action of exercise and cold on vitamin-C excretion in urine, III, 75. Action of hormones and cholic acid on the ascorbic acid content of organs. I. and II., III, 76. Bile of carnivores; racoon (*Nyctereutes viverrinus*) and marten (*Martes melampus*), III, 594. [Composition of] fish bile; occurrence of cholic acid and a bile acid, $C_{27}(28)H_{46(48)}O_6$, in shark bile, III, 693.
- Ohta, T. See Takeda.
- Ohtake, I., changes in blood-sugar during fever, III, 894.
- Ohtsu, K., and Yamafuji, K., fermentation of sugar-cane juice by yeast from digestive organs of grasshopper, III, 627.
- See also Yamafuji, K.
- Ohyama, See under Oyama.
- Oigaard, H. See Abramson, E.
- Oka, S., micellar structure of fibrous substances. I. Micellar orientation as a function of the degree of stretching, I, 197. Theory of double refraction of non-spherical colloids in an ultrasonic field, I, 318.
- Okada, S. See Takino, M.
- Okahara, K., melting point of psoralen (ficusin), II, 84.
- Okamoto, K., Akagi, T., and Mikami, G., histochemical methods of identifying gold, III, 958.
- Mikami, G., and Nishida, M., histochemical methods of identifying palladium, III, 958.
- Utamura, M., and Akagi, T., histochemical methods of identifying silver, III, 958.
- Utamura, M., and Mikami, G., biology of copper. II. Distribution of copper in normal animals. III. Copper in cirrhosis of liver, III, 856.
- Okamoto, M., κ -phase adjacent to α -phase in the copper-silicon system, I, 138.
- See also Osawa, A.
- Okamoto, T., influence of faradic stimulation of various parts of central nervous system on retinal pigment movements of frog, III, 1043.
- Okamoto, T., does sunlight or X-radiation produce a retino-motor active substance in aqueous humour of the frog? III, 1043. Influence of photo-catalysts on effect of ultra-violet light on retinal pigment movements, III, 1044.
- Okamura, H., significance of fructose of blood, III, 233. Consumption of fructose in muscle, III, 243.
- See also Nakamura, H.
- Okamura, T., and Hirone, T., change of magnetic properties of the single crystal of nickel due to temperature, I, 186.
- Okano, K., and Beppu, I., isoflavones from soya bean, II, 485, 803.
- Okano, S. See Hirasawa, K.
- Okatani, M. See Takino, M.
- Okazaki, H. See Mizushima, S.
- Okazaki, M. See Yamamoto, S.
- Okey, R., and Greaves, V. D., anaemia caused by feeding cholesterol to guinea-pigs, III, 854.
- Okinaka, S., Asai, Morikawa, Katuzi, and Inô, S., influence of the parasympathetic [posterior nerve roots] on blood formation, III, 226.
- and Mori, K., changes in doubly refractive substance of adrenal cortex, III, 977.
- See also Kuré, K.
- Okino, T. See Katsurada, F.
- Okita, M. See Suzue, K.
- Okita, T. See Hosoya, Y.
- Okkels, H., application of electrophotometry to quantitative histology, III, 1. Measurement of portions of tissue, cells, and cell inclusions, III, 221.
- and Sand, K., nerve supply of the testis and interstitial cells, III, 481. Morphological relations between nervous system and interstitial cells in human testis, III, 590.
- Okko, V., evolution of [natural] gas at Keuruu [Finland], I, 541.
- Okoti, N., bios. I. Effects of β -alanine, mesoinositol, vitamin- B_1 , - B_2 , and - B_6 on *Saccharomyces cerevisiae*, III, 326.
- Okuda, T. See Asada, T.
- Okumura, K., action of insulin on body temperature, III, 681.
- Okumura, S., papain. III. Mechanism of action of hydrocyanic acid on papain, III, 871.
- Okuno, T. See Nishikawa, T.
- Okuyama, H. See Sata, N.
- Olaru, A. See Istrati, G.
- Olbers, W., Stark effects in the sodium arc spectrum, I, 289.
- Olcott, H. S., and Fontaine, T. D., composition of cottonseeds. I. Solubility of nitrogenous constituents, III, 1018.
- and Thornton, C. D. W., composition of cottonseeds. II. Catalase, III, 1008.
- See also Deatherage, F. E.
- Oldenberg, O., and Rieke, F. F., kinetics of OH radicals determined by their absorption spectrum. IV. Pressure broadening and the line spectrum as background. V. Spectroscopic determination of a rate constant, I, 57, 475.
- and Sommers, H. S., jun., explosion limits of the hydrogen-oxygen mixture, I, 325.
- Oldham, F. K., pharmacology and anatomy of hypophysis of the armadillo, III, 541.
- McCleery, D. P., and Geiling, E. M. K., histology and pharmacology of the hypophysis of the manatee (*Trichechus inunguis*), III, 257.

- Oldham, H. See Schlutz, F. W.
 Oldham, J. W. H., and Oldham, M. A., synthesis of 2:4:6-trimethylglucose, II, 299.
 and Ubbelohde, A. R., structure and melting of long-chain ketones, I, 189. Synthesis of long-chain ketones, II, 98.
 Oldham, M. A. See Oldham, J. W. H.
 Oleson, J. J. See Bird, H. R., Hegsted, D. M., and McKibbin, J. M.
 Oleson, N. L., Chao, K. T., Halpern, J., and Crane, H. R., multiple scattering of fast electrons, I, 590.
 Olewine, J. H. See Whitmore, F. C.
 Olifson, L., alkaline fission of naphthyl ketones, II, 324.
 Oliphant, M. L., helium-deuteron and deuteron-deuteron nuclear reactions, I, 2.
 See also Aston, F. W.
 Olitzki, L. See Levin, B. S.
 Oliva, V. See Sagastume, C. A.
 Olive, M. See Delaville, M.
 Oliver, T., conquest of an occupational disease: phosphorus poisoning in lucifer match making, III, 95.
 Oliver, W. A., acute hyperparathyroidism, III, 1050.
 Oliver, W. W., and Rakieten, M. L., attempts to release absorbed bacteriophage from blood by saponin and glycerol, III, 334.
 Oliveri-Mandalà, F., free radicals and their importance in chemical reactions, II, 491.
 Giacalone, A., and Deleo, E., reactions in sunlight, II, 316.
 Oliverio, A., decomposition of neutral and basic magnesium carbonates in aqueous medium at the b.p., I, 86. Basic magnesium carbonate, I, 90. Styphnic and picric acids in the microchemistry of alkaloids, II, II, 291.
 Olivier, H. See Aubry, M.
 Olivier, H. R., and Bonét-Maury, P., properties of *B. tuberculosis* after α -irradiation, III, 206.
 See also Bonét-Maury, P.
 Olivieri, D. L., staining tigroid substance, III, 226.
 Olivo, O. M., vitamin-B₁ and growth of nervous tissue *in vitro*, III, 286. Slippage of smooth muscle fibres during contraction, III, 484. Coefficient of size-variation of cells of spinal ganglia of different species, III, 569.
 and Pilati, L., application of the continuous, compound interest formula to calculation of rate of growth [of nerve cells] of an organism, III, 127.
 Olijhovich, M. A. See Whyte, R. O.
 Ollano, Z., production of photo-neutrons from a source with Ra- γ + Be, I, 293. Excess of neutrons from a Ra- α + Be source surrounded by beryllium, I, 390.
 Ollershaw, R., femoral neck in childhood, III, 641.
 Ollila, O., relation between chemical structure and toxicity of military [poison] gases, III, 716.
 Ollivier, H., specific magnetic rotatory power of dissolved ferric nitrate and of a ceric sulphate, I, 61. Paramagnetic solutions; comparison of laws of thermal variation of magnetic rotatory power and of susceptibility, I, 408.
 Olmer, D., Dunan, J., and Vague, J., serum-creatine in muscular fatigue, III, 243. Creatine metabolism in hyperthermia, III, 296.
 Olmer, F., mobility of chlorine and magnesium ions in alcohols, I, 83.
 Olmer, J., Baudet, G., and Ageze, tuberculin skin-reaction after histamine, III, 936.
 Olmer, L. J., and Quinet, (Mlle.) M. L., action of gaseous ammonia on anhydrous or hydrated magnesium chloride, I, 621.
 Olmsted, W. H., and Williams, R. D., carbohydrates of vegetables and fruits, III, 1112.
 Olney, M. B. See Smyth, F. S.
 Olovson, T., 8 cases of embolectomy; prevention of thrombosis [by heparin], III, 551. Role of heparin in arterial emboli, III, 816.
 Olsen, A. See Lunde, G.
 Olsen, C., iron salts given to maize in water culture, III, 100.
 Olsen, J. See Gardberg, M.
 Olson, A. R., and Miller, R. J., mechanism of aqueous hydrolysis of β -butyrolactone, I, 32.
 Olson, F. R., Hegsted, D. M., and Peterson, W. H., determination of carotene and vitamin-A in milk, III, 494.
 Olson, F. V. See Rowley, H. H.
 Olson, M., histology of retractor muscles of *Thyone briareus*, Lesueur, III, 445.
 Olson, O. E. See Moxon, A. L.
 Olsson, E., band spectroscopic investigations on molecule formation, I, 508.
 Olszycka, L., association of hypnotic drugs; drugs of barbituric series; increase in anesthetic action, III, 932.
 O'Mahony, O. See Billman, J. H.
 Omaki, T., syntheses in the 1-arylnaphthalene group. I. Ring-closures of the β -benzoyl- α -benzylidenepropionic acid group, II, 370.
 Ombredanne, M., and Thiroloix, P., otogenic meningitis cured by sulphonamide, III, 610.
 O'Meara, F. J., serum reactions, III, 935.
 Omura, S., acid-soluble phosphates in rabbit's brain, III, 832.
 Omura, T. See Kimura, W.
 O'Neil, F. C. See Lyon, R. A.
 Oneto, J. F., and Way, E. L., sulphophenylarsinic acids and their derivatives. II. *p*-Sulphonamidophenylarsinic acid, II, 490.
 Onischtschenko, A. S. See Feofilaktov, V. V.
 Ōno, M. See Takei, S.
 Ono, S., *Spirochata icterohæmorrhagica*. I. Isolation of spirochæto from rats caught in Hukuoka. II. Metabolism. III. Active immunisation with living cultures of weakly virulent spirochætes, III, 205.
 Ono, S. Seturo. See Kondo, H.
 Onsager, L., initial recombination of ions, I, 2. Electrostatic interaction of molecules, I, 183.
 See also Furry, W. H.
 Onstott, R. H. See Sehrell, W. H.
 Oohira, T., polypeptide from *Eisenia bicyclis*. I. Eisenin and its hydrolysis products, III, 733.
 Oosterman, J. See Kruyt, H. R.
 Opie, J. W. See Smith, L. F., and Webb, T. J.
 Oppel, T. W. See Hardy, J. D.
 Oppel, V. V., selective hæmoglycolysis, III, 500.
 See also Kusova, Z. B.
 Oppenauer, R., metal ketyl's; reaction with keto-groups, II, 211.
 Oppenheimer, G. See Mackeith, R. C.
 Oppenheimer, H. E. See Shaklee, A. O.
 Oppenheimer, J. R., and Volkoff, G. M., massive neutron cores, I, 237.
 Oppenheimer, M. J., autonomic control of the retractor penis in the cat, III, 36.
 See also Spiegel, E. A.
 Oppel, L., pathologic picture of thujone and monobromated camphor convulsions; comparison with human epilepsy, III, 671. Experimental vascular disease in rats produced by multiple depletions of vitamin-A, III, 993.
 and Zimmerman, H. M., ulcers of the digestive tract in association with cerebral lesions, III, 147.
 Oppers, K. See Elsner, H.
 Oppean, R. See Benetato, G.
 Opresan, J. See Goia, J.
 Oprisiu, C. See Benetato, G.
 Orbelli, L. A., neural regulation of circulation, III, 456.
 Orcl, J., and Caillère, (Mlle.) S., transformations of magnesian prochlorites under the action of heat, I, 109.
 Orchin, M. See Newman, M. S.
 Orest, R. M., and Bogert, M. T., application of *cyclo*-dehydration reactions to some safrrole derivatives, II, 258.
 Ordman, D. See Agranat, A. L.
 Orékhov, A. P. See Konovalova, R. A., and Proskurnina, N.
 Orem, H. P. See Whitmore, F. C.
 Orent-Keiles, E. See Day, H. G.
 Orestov, I. L., behaviour of electrodes in solutions of foreign ions. III. Behaviour of platinum electrodes in solutions containing air, I, 83.
 Organe, G., and Broad, R. J. B., pentothal with nitrous oxide and oxygen, III, 186.
 Orgel, M. N., Fleishman, A., and Bulger, H. A., serum-amino-nitrogen concentration in different parts of vascular system, III, 1029.
 Orias, O., and Braun-Menendez, E., the heart sounds in normal and pathological conditions, III, 735.
 Oribe, M. See Carillo, R.
 Orimo, R., influence of vitamin-B and akitron on glyoxalase content of human milk, III, 597. Glyoxalase content of human milk and Arakawa's reaction, III, 597. Influence of vitamin-B and yakitron on methylglyoxal-like substance in Arakawa-negative mother's urine, III, 696.
 Orla-Jensen, S., Otte, N. C., and Snog-Kjær, A., vitamin requirement of lactic acid bacteria, and bacteria other than the lactic group in milk, III, 523. Growth substance in peptones, III, 523. Nitrogen nutrition of lactic acid bacteria, III, 524.
 Orlić, S., hydrolysis of arsphenamines, II, 94.
 Orlik, W., iodometric determination of copper in nitric acid solution, I, 625.
 Orlova, I. M., and Nikitin, N. I., lignin and methylated hydrocarbons extracted from fir-wood by dioxan. III, II, 332.
 Orlova, S. D., rôle of nervous and humoral factors in phenomenon of digestive leucocytosis, III, 742.
 Ormond, J. van, spreading of proteins, I, 316.
 Ormont, B., formation of compounds of univalent iron, cobalt, nickel, manganese, and other metals, I, 61.

- Ormont, *B.*, maximum valency of elements and atomic structure. XI. Formation of chemical compounds and the periodic system, I, 61. Conditions of formation and stability of carbonyls and complex cyanides. I, I, 427. Value of the coordination number and the chemical formulae of complex compounds, I, 599.
- Orning, *A.*, and Stempel, *G. H.*, kinetic study of the formation of *d*-glucose-phenylhydrazone, I, 616.
- Ornstein, *A. M.*, and Furst, *W.*, peripheral neuritis due to sulphanilamide, III, 303.
- Ornstein, *I.* See Ballif, *L.*
- Ornstein, *L. S.*, theory of liquid crystals, I, 183.
- and De Braaf, *W.*, scattering of light by anisotropic liquids, I, 180.
- Milatz, *M. W.*, Held, *E. F. M. van der*, and Maas, *W.*, sensitive method for measuring the excitation function of artificial radioactivity, I, 173.
- Milatz, *J. M. W.*, Kate, *H. ten*, and Miesowicz, *M.*, conditions for the quantitative operation of a Geiger-Muller counter for β -rays; ionising power of β -rays as a function of their velocity, I, 170.
- See also Brinkman, *H.*, Fürth, *R.*, Jonker, *G. H.*, Schouten, *J. F.*, and Veen, *J. H. van der*.
- Orr, *J. W.*, malignant tumour of thymus in a rabbit, III, 698. Histological changes in subcutaneous tissues of mice during the induction of sarcoma by carcinogenic hydrocarbons, III, 845.
- See also Bonser, *G. M.*
- Orr, *W. J. C.*, calculations of adsorption behaviour of argon on alkali halide crystals, I, 560.
- See also Roberts, *J. K.*
- Orsb, *A.*, effect of nicotinic acid on erythrocyte and leucocyte [counts] of normal animals, III, 1070.
- and Pipparelli, *E.*, electrical conductivity of serum at different temperatures, III, 229.
- Orsos, *O.*, so-called necro-hormone, III, 215.
- Orten, *J. M.*, and Smith, *A. H.*, site of formation of citric acid in the animal organism, III, 609.
- Orth, *O. S.*, Leigh, *M. D.*, Mellish, *C. H.*, and Stutzman, *J. W.*, sympathomimetic amines in cyclopropane, ether, and chloroform anaesthesia, III, 1087.
- and Stutzman, *J. W.*, constancy of urea clearances in dogs following surgical anaesthetics with cyclopropane, ether, and chloroform, III, 276.
- Ortiz, *T.*, friction sounds from normal serosa, III, 824.
- Ortmann, *P.*, reducing action of light on the skin of the perfused ear, III, 419.
- Wave-length and effect of light on reductions in skin, III, 622.
- Ortner, *G.*, and Zentner, *R.*, measurement of the natural width of X-ray lines, I, 394.
- Orton, *C. R.* See Hill, *L. M.*
- Orton, *G. H.*, calcium changes: importance in diagnostic radiology, III, 176.
- Orton, *J. H.* See King, *G. M.*
- Orzechowski, *G.*, and Gronemeyer, *W.*, mechanism of veritol action, III, 180.
- and Holste, *K.*, oxygen poisoning, III, 24.
- Osako, *H.*, leech method of blood analysis; new micro-method. VII. Determination of blood-sugar, III, 653.
- Osawa, *A.*, and Okamoto, *M.*, X-ray analysis of alloys of the nickel-silicon system, I, 251.
- Osborn, *R. A.*, [determination of] selenium, I, 534.
- Osborn, *W. H.*, cerebrospinal fever treated with M. & B. 693, III, 928.
- Osborn, *W. O.* See McCullagh, *D. R.*
- Osborne, *E. D.*, and Jordon, *J. W.*, prevention of industrial dermatoses, III, 317.
- Osborne, *J.* See Morland, *A.*
- Osborne, *J. L.* See Davies, *W.*
- Osborne, *N. S.*, Stimson, *H. F.*, and Ginnings, *D. C.*, measurements of heat capacity and heat of vaporisation of water in the range 0° to 100°, I, 602.
- Thermal properties of saturated water and steam, I, 602.
- Oschervitsch, *R. E.*, photocolorimetric determination of fluorine, I, 156.
- Oser, *B. L.*, limit of accuracy of A.O.A.C. chick assay for vitamin-D, III, 923.
- Osgood, *A. H.* See Osgood, *E. E.*
- Osgood, *E. E.*, pituitary cachexia, III, 46.
- Culture of human marrow as aid in evaluating sulphanilamide and related substances, III, 859.
- Baker, *R. L.*, Brownlee, *I. E.*, Osgood, *M. W.*, Ellis, *D. M.*, and Cohen, *W.*, leucocyte counts and sedimentation rates of healthy adolescents, III, 812.
- Brownlee, *I. E.*, Osgood, *M. W.*, Ellis, *D. M.*, and Cohen, *W.*, total, differential, and absolute leucocyte counts and sedimentation rates, III, 1026.
- Osgood, *A. H.*, and West, *E. S.*, accurate pipette calibrator and micro-aspirator, I, 433.
- and Powell, *Horace M.*, failure of sulphanilamide to inactivate pre-formed haemotoxins, diphtheric toxin, or tetanar toxin, III, 304.
- Osgood, *M. W.* See Osgood, *E. E.*
- Osgood, *R.*, and Robinson, *L. J.*, brilliant-vital-red as an anticonvulsant in treatment of epilepsy, III, 470.
- O'Shaughnessy, *L.*, Slome, *D.*, and Watson, *F.*, surgical revascularisation of the heart, III, 559.
- Osheroff, *W.* See Bisgard, *J. D.*
- Oshima, *K.*, and Itaya, *S.*, colorimetric determination of vitamin-A, III, 850.
- Oshima, *M.*, and Ikegaki, *I.*, verification of latent hypervitaminosis, III, 1068.
- Takahashi, *Hatuo*, and Murakami, *O.*, co-operation of vitamin-B₁ and -C in organism, III, 1070.
- Oshima, *Y.*, vegetable tannins in Formosa. IV, II, 484.
- See also Ishii, *M.*
- Oskerk, *A. P.*, preparation of alkene and alkine halides of high mol. wt., II, 45.
- Osnitzkaja, *L. K.*, nitrogen metabolism of *A. niger*, III, 100.
- Osofsky, *A. G.* See Felsen, *J.*
- Osokin, *A. S.*, complexes of magnesium chloride with organic oxygen compounds, II, 53.
- Separation of organic compounds containing oxygen from their mixtures with hydrocarbons, II, 529.
- Osol, *A.*, and Cox, *J. R.*, reduction of alkalinity of hypochlorite solutions with sodium hydrogen carbonate, I, 321.
- Osswald, *K.*, Siemens short-wave apparatus for 1-m. wave-length and 700-watt high-frequency current, III, 783.
- Osterberg, *A. E.*, vitamin-K: its distribution and chemical properties; methods of preparation and assay, III, 77.
- See also Butt, *H. R.*, Drips, *D. G.*, Falconer, *M. A.*, Griffin, *M.*, and Lundy, *J. S.*
- Osterhammel, *K.* See Hiedemann, *E.*
- Osterholz, *E.*, chemo- and sero-therapy in experimental infection with pneumococci, III, 305.
- Osterhout, *W. J. V.*, changes of apparent ionic mobilities in protoplasm, III, 420.
- Calculations of bioelectric potentials. V. Potentials in *Halicystis*, III, 1007.
- and Hill, *S. E.*, calculations of bioelectric potentials. IV. Effects of calcium on potentials in *Nitella*, III, 210.
- Chemical restoration in *Nitella*. III. Effects of inorganic salts, III, 435.
- Osterwald, *K. H.*, effect of strophanthin on experimental impairment of coronary circulation, III, 745.
- See also Hildebrandt, *F.*
- Ostroff, *R.*, and Henry, *B. S.*, utilisation of various nitrogen compounds by marine bacteria, III, 792.
- Ostrogovich, *A.*, and Ostrogovich, *G.*, γ -triazines. XXXVII. Liebig and Wohler's so-called trigenic acid: 2:4-diketo-6-methyltriazidine or cycloethylenobiuret, II, 89.
- Ostrogovich, *G.* See Ostrogovich, *A.*
- Ostrouch, *S.* See Zawadzki, *J.*
- Ostroumov, *E. A.*, precipitation of manganese as crystalline sulphide, by means of hydrogen sulphide in presence of hexamethylenetetramine, I, 279.
- and Maslennikova, *G. S.*, separation of cobalt and nickel from manganese, I, 41.
- Ostwald, *A.*, and Risch, *W.*, weight of thyroid gland in Switzerland, III, 908.
- Ostwald, *W.*, electrolyte coagulation and coefficient of electrolyte activity, I, 24.
- Swelling and solubility of high-molecular materials in organic solvents, I, 197.
- Electrolyte adsorption and activity coefficient. I. Adsorption of acids on charcoal. II. Adsorption of acids by carbon from mixtures of water and organic liquids. III. Adsorption of neutral salts. I, I, 366, 414, 519.
- Electrolyte coagulation of weakly solvated sols and electrolyte activity. XI. Influence of ion spreading, I, 370.
- Electrolyte coagulation of hydrophobic sols, I, 470.
- Osuitscheva, *A. G.* See Palei, *T. J.*
- Oswald, *F.*, back-diffusion of fast electrons in narrow channels; production of sharp luminous spots in X-ray tubes, I, 394.
- Oswald, *W.*, peroral immunisation, III, 879.
- Otani, *Y.*, bacterium (*Pseudomonas fibrolysis*, n. sp.) which decomposes cellulose, III, 523.
- Relation between morphology and physiology of *Aspergillus oryzae*, III, 627.
- Enzymes in young mycelia of *Aspergillus oryzae*, III, 723.
- See also Sakaguchi, *K.*
- Otanli, *T.*, influence of excitation of nerve fibre on excitability of nearby fibres in same nerve trunk, III, 664.
- Otsuki, *H.*, citronellal-terpene. II. Structure of the new terpene "menogene," II, 169.
- Ott, *A.*, use of bone-marrow culture for demonstration of *B. typhosus* and *paratyphosus*, III, 207.
- Clinical experiences with veritol, III, 933.
- Ott, *G. L.* See Holmes, *C. E.*
- Ott, *H.*, relativistic electron in the crossed field, I, 55.
- Ott, *L. H.* See Friedman, *I.*

- Ottaviani, G., lymph vessels of the human lung, III, 241. Development, form, structure, and functional significance of the anal columns, III, 1021.
- Otte, N. C. See Orla-Jensen, S.
- Otten, L., and Hennemann, I. P., combined (simultaneous) immunisation against tetanus, III, 877.
- Ottenberg, R., treatment of hæmolytic streptococcus infections and the newer applications of sulphanilamide, III, 410.
- and Berck, M., sulphanilamide therapy for suppurative pyelophlebitis and liver abscesses, III, 177.
- and Fox, C. L., jun., rate of removal of hæmoglobin from the circulation and its renal threshold in man, III, 486.
- See also Fox, C. L., jun.
- Ottenssoer, F., alum-precipitated toxin, III, 203. Serological paternity tests, III, 1028.
- and Willenegger, H., group-specific A reactions of immune peptone, and pepsin preparations, III, 552.
- Ottenstein, B., and Ladewig, P., action of colloidal cholesterol on extract of Shope's cottontail rabbit papilloma, III, 158.
- See also Ladewig, P.
- Otto, H., action of adrenal cortex extracts and ascorbic acid in malignant diphtheria, III, 43. Early detection of lead poisoning by quantitative porphyrin determination, III, 413.
- and Ruhmekorb, F., determination of vitamin-B₁ using the step photometer, III, 165.
- Otto, J. S. See Alcock, J. O.
- Otto, U. See Hauptstein, P.
- Ottson, M. See Lund, H.
- Ottung, K. See Veibel, S.
- Otvos, J. W., and Edsall, J. T., Raman spectra of deuterium-substituted guanidine and carbamide, I, 550.
- Oughterson, A. W. See Friedman, I.
- Oumikov, S. See Aubry, M.
- Ourisson, J., and Kastner, M., vapour pressures of solutions of hypochlorous acid at 10° and 20°, I, 523.
- Outhouse, J., Kinsman, G., Sheldon, D., Twomey, J., Smith, J., and Mitchell, H. H., calcium requirement of five pre-school girls, III, 1067.
- See also Kinsman, G.
- Overidge, L. E. See Newitt, D. M.
- Overbeek, G. A., and Querido, A., hypophysis and blood counts, III, 5.
- See also Querido, A.
- Overhoff, J., organic chemistry of proteins, II, 192.
- See also Wibant, J. P.
- Overholser, L. G. See Kolthoff, I. M., and Yoe, J. H.
- Overholser, M. D. See Barks, O. L., and Wells, L. J.
- Overlack, P. See Schlomka, G.
- Overstreet, R. See Jenny, H.
- Overstreet, R. M., emphysema of portion of lung in early months of life, III, 1034.
- Ovtschkin, E. K. See Biletzki, S. F.
- Ovtscharov, K., enzyme of pathogenic fungi causing the splitting off of urea from protein, III, 322.
- Owen, B. B., extrapolation of conductivities of strong electrolytes of various valency types, I, 474. Simple teleost kidney in the genus *Cyclothone*, III, 274.
- and Gurry, R. W., electrolytic conductivity of zinc sulphate and copper sulphate in water at 25°, I, 82.
- Owen, C. A., Hoffman, G. R., Ziffren, S. E., and Smith, H. P., blood coagulation during infancy, III, 1027. Vitamin-K therapy; compensatory mechanisms at low prothrombin levels, III, 1027.
- Owen, E. A., formation of Widmanstätten figures in meteorites, I, 162.
- and Burns, B. D., crystal structure of a natural nickel-iron alloy, I, 585.
- and Edmunds, I. G., silver-zinc equilibrium diagram and the structure of the ζ -phase, I, 69. X-Ray study of silver-zinc alloys rich in silver, below the β -transformation temperature, I, 69.
- and Roberts, E. W., factors affecting the limit of solubility of elements in copper and silver, I, 193.
- Rogers, J., and Guthrie, J. C., X-ray study of silver-cadmium alloys, I, 465.
- and Sully, A. H., equilibrium diagram of iron-nickel alloys, I, 364.
- and Williams, R. W., effect of temperature on intensity of X-ray reflexion, I, 50. Effect of temperature on intensity of X-ray reflexions from gold, I, 599.
- Owen, E. C., calcium requirement of older men, III, 302.
- See also Robertson, A.
- Owen, (Miss) K., Quayle, O. R., and Beavers, E. M., organic parachors. (II) Temperature and (III) constitutive variations of parachors of a series of tertiary alcohols, I, 304.
- See also Quayle, O. R.
- Owen, S. E., Weiss, H. A., and Prince, L. H., carcinogens and planarian tissue regeneration, III, 697.
- See also Allaben, G. R.
- Owen, W. L., Mobley, R. L., and Arroyo, R., *Clostridium (Bacillus) tetrylium* nov. sp., a new species of the *Acetobutylicum* group, III, 329.
- Owens, James S., spectrographic methods of trace analysis, I, 217.
- Oxford, A. E., Raistrick, H., and Simonart, P., biochemistry of micro-organisms. LX. Griseofulvin, a metabolic product of *Penicillium griseo-fulvum*, Dierckx, II, 175.
- See also Calam, C. T.
- Oxley, W. H. F., obstetric shock, III, 143.
- Oyama, S., micro-determination of formaldehyde, II, 43.
- Öyama, Y., and Iwasé, K., absorption of gas in the form of bubbles, I, 252.
- Oyamada, T., constitution of fustin, II, 221.
- Ozaki, M. See Kodama, T., and Seto, I.
- Ozansoy, M. See Arndt, F.
- Ozolinš, J. See Zarinš, E.
- Ozorio de Almeida, M., Moussatché, H., and Vianna Dias, M., factors in action of concentrated sodium chloride solutions on nerve, III, 28. Use of hypertonic saline solution in production of epileptiform attacks by rapid cooling of the spinal cord, III, 30. Richet's inhibition, III, 370.
- P.
- Pabst, A., relation of stellerite and epidesmine to stilbite, I, 285. Crystal structure and density of delafossite, I, 344. Fluoride with pyrochlore structure, I, 345.
- See also Bannister, F. A.
- Pace, J. See Brooks, J.
- Pacevitz, H. A., and Gilman, H., oxidation of lithium phenyl, II, 364.
- See also Gilman, H., and Marvel, C. S.
- Pache, H. D., allergic reaction against liver extract, III, 959.
- Pacheco, G., and Para, M., vitamin-C and Schwartzman's phenomenon, III, 75. Vitamin-C and anaphylaxis, III, 75.
- Pacini, A. J., "saturation" method for treatment of breeding failures with wheat-germ oil, III, 292.
- Packalen, T., case of myeloma with spontaneously crystallising protein in serum and urine, III, 848.
- Packer, D. M. See Scott, G. H.
- Packman, D. J., oxygen therapy by the open box method, III, 125.
- Pacsu, E., glucofuranosides and thioglucofuranosides. VI. Preparation of dimethyl acetal and methylfuranosides from *d*-fructose diethyl mercaptal, II, 407. Condensation of the hexapeptide ester of glycine into the 96- and higher (3×2) peptide esters, II, 535.
- and Scattergood, A., crystalline β -methylmannofuranoside and mannose dimethyl acetal, II, 142.
- and Trister, S. M., preparation of fully methylated carbohydrates and their derivatives, II, 493.
- Trister, S. M., and Green, J. W., isopropylidene derivatives of the mercaptals of monosaccharides. IV. 4:5-isopropylidene derivative of the di-benzyl mercaptan and of the dimethyl acetal of *d*-galactose, II, 494.
- and Wilson, E. J., jun., formation of α -ethylthioglucopyranoside from glucose ethyl mercaptal, II, 407. Glucofuranosides and thioglucofuranosides. V. Hydrolysis of α -ethylthioglucopyranoside, II, 407.
- Padget, P., Sullivan, M., and Moore, J. E., syphilis, III, 414.
- Paemel, O. van. See Itterbeek, A. van.
- Paes, E., origin of active substances of the heart, III, 965.
- Paes de Vasconcellos, F. See Moniz de Bettencourt, J.
- Paetow, H., spontaneous electron emission from electrodes and the field electron emission from thin layers of insulators as an after-effect of the discharge through gases, I, 229.
- Paetzold, I. See Stocker, O.
- Paganini, M. L. See Verona, O.
- Page, A. P. M., Seager, K. G., and Ward, E. M., transfusion with placental blood, III, 230.
- Page, E. W. See McNeile, L. G.
- Page, I. H., clinical study of malignant hypertension, III, 365. Producing persistent hypertension by cellophane, III, 658.
- See also Blatt, E., Corcoran, A. C., Helmer, O. M., and Kohlstaedt, K. G.
- Page, J. E. See Dippy, J. F. J.
- Page, L. R., deposition of native copper under hydrothermal conditions, I, 108.
- Paget, M., and Berger, R., Schryver-Fosse reaction applied to analysis, II, 133. Human allantoinuria, III, 66. New colour reaction for ascorbic acid, III, 403.
- and Pierrart, G., determination of cholesterol and its esters. I. Precipitation of cholesterol-digitonin complex in water-acetone-trichloroethylene medium. II. Extraction of "total cholesterol"; Liebermann's reaction as basis for determination; determination of ratio of esters to total cholesterol, II, 352.

- Paget, R. A. S., vowel vibrations and vowel production, III, 255. Binocular stereoscopic vision, III, 1043.
- Pagnello, L. See Murphy, R.
- Pagniez, P., treatment of polycythemia with a diet poor in albumin, III, 6.
- Liberson, W., and Plichet, A., electroencephalogram in epilepsy, III, 34, 469.
- Pahl, M., rate of growth of iodine crystals in foreign gases, I, 477.
- Paic, M., determination of mol. wt. by an ultra-centrifuge method, without an observation system, I, 539. Determination of the sedimentation constant of hemolysin, III, 449. Measurement of quantities of antibody and antigen in precipitation reactions, III, 798. Determination of the sedimentation constant of diphtheria antitoxin, III, 875.
- and Deutsch, V., refractometric determination of serum-protein between 15° and 27°, III, 11. Micro-determination of globulins, III, 222.
- Paige, B. See Wolf, A.
- Paige, B. H. See Wright, F. H.
- Pailer, M. See Chwala, A.
- Paillard, H. See Briner, E.
- Paillard, R. See Wyss-Chodat, F.
- Paillas, J. E. See Cornil, L., and Escarras, A.
- Paillot, A. See Gratia, A.
- Paine, W. G. See Katz, G.
- Painter, E. E., application of spectrographic methods to the determination of total body-water with sulphanilamide, III, 953.
- Pajeau, R., effect of beryllium, magnesium, zinc, and cadmium bromides on the bromination of benzene, II, 102.
- Pak, Y. L., bactericidal activity of sterilised and non-sterilised Korean condiments against dysentery bacilli, III, 726.
- Pakschver, A., and Mankasch, E., vapour pressure of cellulose ester solutions, I, 76.
- Pal, B. P., and Ramanujam, S., induction of polyploidy in chilli [*Capsicum annum*, L.] by colchicine, III, 534.
- Pal, R. K., nutritive value of pulses, III, 765.
- and Singh, N., effect in rats of supplementing a South Indian diet with calcium and phosphorus, III, 162.
- Pal, S. N. See Narasimham, M.
- Palache, C., crystallography of meyerhofferite, I, 109. Gratonite; preliminary description of a new mineral from Cerro de Pasco, Peru, I, 284. Krochnkite and natrochalcite from Chile, I, 438. Antlerite, I, 500. Brochantite, I, 585.
- [with Richmond, W. E., and Winchell, H.], crystallographic studies of sulphosalts: baumhauerite, meneghinite, jordanite, diaphorite, freieslebenite, I, 226.
- and Jarrell, O. W., salesite, a new mineral from Chuquicamata, Chile, I, 542.
- and Richmond, W. E., caledonite, I, 587.
- Palade, G. E. See Ilescu, C.
- Paland, J. See Butenandt, A., and Dimroth, K.
- Palant, B. L. See Tzechnovitzer, M. M.
- Palatnik, L., system nitrogen-steel, I, 19.
- Palei, T. J., activation of *A. niger* by cross-culturing, III, 100.
- and Frantzuzova, M. A., replacing sugar by other materials in citric acid production, III, 100.
- Palei, T. J., and Osuitscheva, A. G., mutual interaction of *A. niger* and *Penicillium luteum-purpureogenum*, Thom and Church, III, 100.
- Paley, C. See Broadhurst, J.
- Palfray, L., and Sabatay, S., catalytic dehydrogenation using ordinary or Raney nickel, II, 115. Chlorometric determination of the ethylene linking, II, 132.
- Sabatay, S., and Halasz, A., preparation of alkoxy- and arylalkoxy-ethanols and higher homologues, II, 155. Catalytic dehydrogenation using nickel; new applications; kinetic experiments, II, 376.
- Sabatay, S., and Rovira, S., determination of amido- and nitrile-nitrogen as ammonia, II, 526.
- Palilova, K. See Kniaginitshev, M. I.
- Palisa, C., cerebral disturbances as results of insulin shock treatment, III, 34.
- and Flach, A., awakening from hypoglycemic shock, III, 131.
- Palitz, L. L., splenic volume and polycythemia of artificial fever in intact unanesthetised dogs, III, 743.
- Palkin, S., and Chadwick, T. C., device to prevent bumping and promote boiling, I, 583.
- See also Fleck, E. E.
- Pall, D. B., and Maass, O., heat capacity of ethylene in the critical range, I, 189.
- Palladin, A. V., and Ochrimenko, I. P., creatine content of various fish muscles, III, 567.
- Palladina, L. I., and Dubovtzeva, L. A., effect of polyneuritis on lactic acid and glycogen contents of pigeon muscles in various stages of fatigue, III, 74.
- Pallaske, G., method of diagnosing udder tuberculosis by sectioning of the milk centrifugate, III, 431.
- Pallo, G., colloid in the pancreas of bony fishes, III, 420. Structure and absorbent power of the terminal pancreatic duct, III, 690. Pancreatic islets in teleosts, III, 739.
- Pallu, L. See Devaux, H.
- Palmer, A., quantitative determination of urinary oestrogenic hormone (biological method), III, 585. Placenta previa in rhesus monkey, III, 1023.
- and Zuekerman, S., similarity of stilbesterol and natural oestrogenic agents, III, 589.
- Palmer, C. E., Klein, H., and Kramer, M., determining post-eruptive tooth age, III, 345.
- Palmer, E. H. See Atkinson, J. R.
- Palmer, F. S. See Small, L.
- Palmer, G. W., and Hanbury, D. R., sulphanilamide rash, III, 502.
- Palmer, H. A., beri-beri complicating anorexia nervosa, III, 402. Thrombophlebitis occurring in patients receiving barbiturates; an unrecorded complication of sleep treatment, III, 862. Vertebral fractures complicating convulsion therapy, III, 1038.
- Palmer, K. J. See Pauling, L.
- Palmer, L. S. See Haydak, M. H.
- Palmer, N., nutritive value of wheat products, III, 701.
- and Mottram, J. C., influence of phytin and fats on production of rickets by a cereal diet, III, 497.
- Palmer, Raoul, and Devillers, J., thermal action of sex hormones in female, III, 756.
- Palmer, R. C., and Rideal, E. K., adhesion in detergency, I, 317.
- Palmer, R. S., and Castleman, B., paraganglioma (chromaffinoma, pheochromocytoma) of the adrenal gland simulating malignant hypertension, III, 377.
- Palmer, W. G., thermal properties and heats of adsorption of films on vitreous silica, I, 73.
- Palmer, W. L., and Templeton, F., effect of radiation therapy on gastric secretion, III, 841.
- Palmieri, G. G., and Valenti, A., biological effect of X- and γ-rays, III, 868.
- Palmquist, E. M., simultaneous movement of carbohydrate and fluorescein in opposite directions in the phloem [of plants], III, 1016.
- Palomaa, M. H., and Kaski, T. K., ether-like compounds. XXII. Synthesis of ether acetals by aid of γ-halogenoethers, II, 138.
- Salmi, E. J., and Korte, R., ether-like compounds. XXIII. Saponification of the trichloroacetic esters, I, 327.
- Salmi, E. J., and Suoja, K., ether-like compounds. XXI. Acid ester- and ether-hydrolysis of the dialkyl carbonates, I, 206.
- Palti, V., calcæmia and vegetative nervous system of inhabitants of the Andean plateaux, III, 234.
- Paltrinieri, and Galavotti, B., comparison of effect of irradiation on carcinoma of the skin and normal skin, III, 847.
- Paluch, J. See Snieszko, S. F.
- Palumbi, G., structure of sympathetic ganglia in mammals, III, 1023.
- Pamfil, G., and Maxim, M., inhibition of pancreatic enzymes by hydroxy-acids, III, 199. Ascorbic acid content of indigenous food-stuffs [of Germany], III, 290.
- Pamfilov, A. V., and Kiparisov, G. N., influence of aqueous suspension of pigments on the potential of metals, I, 83.
- Pamourgias, B., and Routier, D., relation between electric systole and heart volume, III, 744.
- Pampana, E. J., therapeutic efficacy of totaquina in human malaria. I, III, 83.
- Panagiotakos, P. C. See Milas, N. A.
- Pandalai, K. M., biochemistry of nitrite production. I. Non-participation of peroxidase and catalase in the biological oxidation of ammonia by nitrite bacteria. II. Non-association of nitrite production with dehydrogenation, III, 328, 523.
- Pandit, C. G. See Shortt, H. E.
- Pandya, K. C., and Sodhi, T. S., synthesis of 3-aminocoumarin, II, 384.
- Sodhi, T. S., and Mittal, D. S., condensation of aldehydes with malonic acid. XII. Influence of groups and other factors, II, 478.
- See also Mehra, R. K.
- Panevkin, K. See Fabrikant, V.
- Panferov, K. K. See Kosiakova, A. V.
- Pang, K. H. See Ch'iu, T. L.
- Panizzi, L., new syntheses of isooxazole-polycarboxylic acids. I, II, 454.
- See also Quilico, A.
- Panizzon, L., excretion of esidron, III, 509.
- See also Hartmann, M.
- Pankhurst, K. G. A. See Adam, N. K.
- Pankratov, A. I., properties of unimolecular layers on salt solutions. I, I, 468.
- See also Frumkin, A.
- Pankratz, D. S., Graafian follicles in an adult human ovary, III, 262.

- Pannevis, W. See Eekelen, M. van.
- Pannhorst, R., diagnostic value of pneumomediastinum, III, 367. Iodism after administration of iodosol, III, 1004.
- and Riege, A., seasonal influence on diabetes, III, 300.
- Pannocchia-Laj, F., relation between amount of chromatin and size of plant organs, III, 740.
- Panse, T. B., and Wheeler, T. S., benzylidenecoumaranones considered as chalkones, II, 33.
- Pantoja, A. See Henckel, K. O.
- Panzer, L. M. See Rhoads, J. E.
- Paounoff, P., luminescence of water under the action of ultrasonics, I, 452.
- Papanicolaou, G. N., Ripley, H. S., and Shorr, E., suppressive action of testosterone propionate on menstruation and its effect on vaginal smears, III, 482.
- See also Fraenkel, L.
- Papapetrou, A., theory of superconductivity, I, 132. Diamagnetism of an electron gas. III, I, 408.
- See also Hönl, H.
- Papastamatiou, J., corundum rocks in the island of Naxos (Greek Archipelago), I, 500.
- Papayanopoulos, G., and Schroeder, H., thrombocyte count and vitamin-C, III, 704.
- Papazian, R. See Radovici, A.
- Papkov, S. See Kargin, V.
- Papp, G. See Bay, Z.
- Papp, J., insulin hypersensitivity in gastric hypersecretion, III, 140.
- and Bugyi, B., micro-method for determination of potassium in whole blood, III, 233.
- Pappenheimer, A. M., nutritional muscular dystrophy in young rats, III, 663.
- Pappenheimer, A. M., jun. See Lundgren, H. P.
- Paquot, C., catalytic properties of phthalocyanines in oxidations, II, 488.
- Para, M. See Pacheco, G.
- Paradachvili, A. I. See Gavrilov, N. I.
- Parade, G. W., drug treatment of heart diseases, III, 777.
- and Franke, D. H., electrocardiogram in cases of hæmorrhagic diathesis, III, 360.
- See also Gutzeit, K., and Kränke, Y.
- Paraf, J., Zivy, P. G., and Desbordes, J., apparatus with movable framework for immobilising laboratory animals, III, 344.
- Paranjpe, G. R., Naik, Y. G., and Vaidya, P. B., scattering of light by large water drops. I. and II., I, 354.
- See also Ranade, J. D.
- Paranjpe, Y. S. See Desai, B. N.
- Paras, E. M., constituents of leprotic nodules, III, 68.
- Parenti, G. C., temperature in the trachea during various types of narcosis, especially with heated ether vapour, III, 313. Rate of elimination of ether by means of the venous blood in various types of narcosis, III, 313.
- Pareti, G. See Ferrari, A.
- Parfentiev, L. N., and Schamschurin, A. A., reaction between triphenylbenzylphosphonium bromide and sodium, II, 566.
- Parfitt, D. N. See Gillman, S. W.
- Parga-Pondal, I. See Burri, C.
- Parhon, C. I., and Werner, G., protein-lipin relationship in endocrine disturbances, III, 138.
- Paris, Raoul. See Clerc, A.
- Paris, René, African Apocynaceæ; *Seoulou (Holarrhena africana)*, A.D.C., III, 342.
- and Beaquesne, L., bitter principle of liana quinine (*Tinospora crispa*, Miers), III, 1113.
- and Boule, A., crystallisation of vitreous sodium and calcium metaphosphates, I, 531.
- and Mignon, H., reputedly febrifugic Meliaceæ, III, 1113.
- See also Mascré, M., and Mondain-Monval, P.
- Park, C. F., jun., dolomite and jasperoid in the Metalline district, N.E. Washington, I, 288.
- Park, E. A., use of vitamin-D preparations in prevention and treatment of disease, III, 291.
- Park, F. R. See Cutler, J. W.
- Park, I. O., vitamin-A deficiency as shown by the visual photometer and clinically, III, 163.
- Park, J. See Millar, W. M.
- Park, R. D. See Mouzon, J. C.
- Parke, H. C. See Blicke, F. F.
- Parke, J. P. See Green, E.
- Parker, C. A. See Le Fevre, R. J. W.
- Parker, E. See Fricke, H., and Kotz, J.
- Parker, E. A., Patzer, W. E., and Ritter, G. J., micro-structure and diffraction pattern of basswood ash, III, 341.
- Parker, E. B. See Tarasov, L. P.
- Parker, F., jun., and Tenney, B., jun., oestrogenic content of the tissues in pregnancy, III, 58.
- Parker, G. M. See Lex, J. K.
- Parker, S. See Goldfarb, W.
- Parker, W. E., and Griffin, F. P., determination of iron and copper in biological material by photo-electric colorimetry, III, 640.
- Parker-Rhodes, A. F., toxic substances obtained from the wheat plant which inhibit germination of uredospores of various wheat rusts, III, 1018.
- Parkes, G. D., and Aldis, B. C., reactivity of the methylene group in derivatives of phenylacetic acid, II, 19.
- Parkhurst, H. J., and Lukens, J. A., dermatitis due to butyn, III, 615.
- Parkins, W. M., Swingle, W. W., Taylor, A. R., and Hays, H. W., effect of adrenal cortical hormone on circulatory collapse of adrenaline shock, III, 139.
- See also Swingle, W. W.
- Parkinson, D. B. See Herb, R. G.
- Parkinson, J. See Gavey, C. J.
- Parks, G. S., free-energy relations among the paraffin and olefine hydrocarbons, I, 14.
- See also Moore, G. E.
- Parks, H. C. See Vosburgh, W. C.
- Parks, J., granulosa-cell tumours of the ovary with precocious puberty, III, 381.
- Parks, W. G., and Carritt, D. E., improved stopcock substitute, I, 341.
- Parlato, S. J., the mayfly as an exciting cause of seasonal allergic coryza and asthma, III, 191.
- Parlee, N. A. D. See Steacie, E. W. R.
- Parnas, J. K. See Korzybski, T.
- Parney, F. S., Division of Industrial Hygiene, III, 619.
- Parodi, A. S., pituitary and blood, III, 473.
- Parodi, M., spectra of methane derivatives in the far infra-red, I, 119.
- See also Barchewitz, P., and Duchesne, J.
- Parow, E. See Pohlman, R.
- Parpart, A. K., and Dziemian, A. J., determination of carbon in organic compounds, II, 193.
- See also Hunter, F. R.
- Parratt, L. G., X-ray resonance absorption lines in the argon K spectrum, I, 543.
- Parrod, J., formation of oxamide by oxidation of dehydroascorbic acid with hydrogen peroxide in ammoniacal solution, II, 140.
- See also Loeper, M.
- Parrot, J. L., properties of alcohol extract of tissues of *Maia squinado*, III, 181.
- Effect of alcoholic extracts of the organs of *Maia squinado* on the intestine of *Maia*, III, 311. Decarboxylation of L-histidine by the kidney in anaphylaxis, III, 595.
- See also Tinel, J., and Ungar, Georges.
- Parry, D. E. See McNab, D. J. N.
- Parry, G. See Michiels, J. L.
- Parschin, A. N., and Sveschnikova, N. A., breakdown of carnosine by muscle enzymes, III, 422.
- Parsons, C. G., and Wright, F. H., circulatory function in anæmias of children. III. Alterations in electrocardiogram, III, 1030.
- Parsons, C. H. See Weil, A. J.
- Parsons, F. B., and Twort, R. J., chronic thyrotoxic myopathy, III, 908.
- Parsons, L. D., changes in the lymph glands of tumour-bearing mice, III, 57.
- Parsons, L. G., nutritional problems of childhood, III, 71.
- Parsons, R. J., and McMaster, P. D., effect of the pulse on formation and flow of lymph, III, 23. Effect of the pulse on spread of substances through the tissues, III, 23. Normal and pathological factors influencing the spread of a vital dye in the connective tissue, III, 453.
- See also McMaster, P. D.
- Parsons, W. H., volcanic centres of the Sunlight area, Park County, Wyoming, I, 284.
- Parsy, D. See Combemale, P.
- Partington, J. R., origins of the atomic theory, I, 454.
- and McKie, D., historical studies on the phlogiston theory. IV. Last phases of the theory, I, 342.
- and Towndrow, R. P., reduction of cuprous and cobalt chlorides by deuterium, I, 321.
- Partington, P. F., and Nathanson, I. T., action of oestrin on blood pressure of the anæsthetised cat, III, 980.
- Parton, H. N., and Gibbons, R. C., thermodynamic dissociation constants of oxalic acid, I, 321.
- and Mitchell, J. W., activity coefficients and transport numbers of zinc bromide at 25° from o.m.f. measurements, I, 419.
- and Nicholson, A. J. C., thermodynamic dissociation constants of oxalic acid in water and methanol-water mixtures, I, 321.
- Robinson, Robert A., and Metson, A. J., anomalies in aqueous solutions of potassium chloride and lead chloride, I, 250.
- Partridge, R. C., respiratory accelerator action of carotid sinus-cardiac depressor mechanism, III, 898.
- Partridge, S. M., influence of route chosen for an asymmetric synthesis on the configuration of the resulting enantiomorph, II, 428.

- Parts, A. See Fricke, H.
- Parvis, V. P., glycogen and ossification in rat's embryo, III, 67.
- Pascanu, O., and Radulescu, N., anti-gangrene serum in lung abscess, III, 630.
- Paschen, F., "ghosts" of lines produced by diffraction gratings, I, 112.
- Paschke, P. See Neunhoeffer, O.
- Paschkes, E. See Deutschberger, O.
- Paschla, G., active diphtheria immunisation in children with alum-precipitated diphtheria toxoid ("di-toxoid acid"), III, 525.
- Paskind, H. A. See Lonergan, R. E.
- Pasqualini, R. Q., hormonal control of urine secretion in the toad, III, 473. Effect of pituitary extracts on diuresis in the toad, III, 475.
- Pasqualino, A., pars intermedia of the grey matter of spinal cord of *Erinaceus europaeus*. I. Characteristics of the cells. II. Cell structure, III, 129.
- Pasquet, P. See Mondon, H.
- Pasquier, M. A., sodium content of total blood and serum in mammals, III, 963. See also Urbain, A.
- Passedouet, H., and Vaisman, A., therapeutic properties of products obtained by coupling amino-acids and proteins with sulphur derivatives of benzene, III, 611.
- Passey, R. D., factors in carcinogenesis, III, 598.
- Passing, H., arylpyridines. X. Thiazole derivatives, II, 289. See also Diltthey, W.
- Passino, H. J. See Simons, J. H.
- Passinski, A., compressibility and solvation of solutions of electrolytes, I, 16.
- and Petrov, I., influence of neutral salts on the position of the isoelectric point of gelatin, I, 469. Influence of concentration of gelatin on the position of its isoelectric point, I, 469.
- Passmore, R. See Aykroyd, W. R.
- Passvik-Chlopin, M. A. See Chlopin, V. G.
- Pasteels, J., factors in determination of bilateral symmetry in amphibia, III, 60. Determination of bilateral symmetry, III, 60.
- Pasternack, S., fine structure of H_2 and D_2 , I, 111.
- Pastinszky, S. von, action of glycine in progressive muscular dystrophy, III, 663.
- Patalano, A. See Castex, M. R.
- Patane, L., gonadotropic hormones and sex, III, 588.
- Patat, F., and Küchler, L., homogeneous decomposition reactions of simple organic compounds, I, 85.
- Patay, R., structure and physiology of Malpighian tubules in the potato beetle, III, 486.
- Patek, A. J., jun., and Haig, C., occurrence of abnormal dark adaptation and its relation to vitamin-A metabolism in patients with cirrhosis of the liver, III, 1042.
- Patelski, R. A. See Blicke, F. F.
- Paterson, J. C., relation of physical exertion and emotion to precipitation of coronary thrombi, III, 745.
- Paterson, J. S., flagella antigens of organisms of the genus *Listerella*, III, 429.
- Paterson, S., ignition of inflammable gases by hot moving particles, I, 475.
- Patocka, F., and Ilavsky, J., L-ascorbic acid and anaerobes, III, 726.
- Patras, M. C. See Tweedy, W. R.
- Patry, J. F. C. See Stueckelberg, E. C. G.
- Patten, B. M. See Hoff, E. O.
- Patterson, A., jun. [with Felsing, W. A.], heats of solution of gaseous di- and trimethylamines, I, 28.
- Patterson, A. L., homometric structures, I, 456.
- Patterson, C. A., Smith, E., and Hale, H. B., food intake and gastro-intestinal motility in the rat during chronic carbon monoxide asphyxia, III, 387.
- Patterson, H. S. See Beadle, D. G.
- Patterson, T. L. See Loew, E. R.
- Patterson, T. S., Blaise de Vigencro, John Ferguson, and benzoic acid, I, 162. Binocular stereoscopic vision, III, 133, 837.
- Lamberton, A. H., and Cunningham, R. M., influence of solvents and of other factors on rotation of optically active compounds. XXXVII. Asymmetric solvent action, I, 411.
- Patterson, W. I. See Du Vigneaud, V.
- Pattn, H. S., and Kruger, P. G., spectra of scandium VI and scandium VII and their relation to the isoelectronic sequences starting with sulphur and phosphorus, I, 49.
- Patton, A. R., Wilgus, H. S., jun., and Harshfield, G. S., production of goitre in chickens, III, 476.
- Patton, L. T., quantitative measurement of natural rate of growth of calcite crystals in geodes, I, 426.
- Patton, P. B., blood transfusion equipment and reaction prevention factors, III, 448.
- Patton, R. L. See Craig, R.
- Paturel, L. See Marchal, S.
- Patwardhan, V. N., and Chitre, R. G., effect of toxic doses of vitamin-D on ash, calcium, and phosphorus content of the bones and on excretion of halogen, calcium, and phosphorus in the albino rats, III, 291.
- and Nhavi, N. G., absorption of phosphates from the intestine, III, 691.
- Paty, M., 5-bromo-2-methoxyphenylacetonitrile and its derivatives, II, 62.
- Patzner, W. E. See Parker, E. A.
- Paul, F. W., and Knauss, H. P., rotational structure of the $^2\Sigma$ $^3\Pi$ bands of BF, I, 118.
- Paul, H. See Butenandt, A.
- Paul, M., theory of actual gases, I, 190.
- Paul, P. K., isoquinoline compounds. I, II, 180.
- Paul, R., properties of isomeric 1:4- and 1:5-epoxides, II, 173. Scission of hydrofuran and hydropyran rings with acetic anhydride, II, 274. Action of Raney nickel on alcohols; probability of a union of the catalyst with the hydrogen receptors, II, 296. Reactivity of two diene systems of furylethylene, II, 334. Scission of hydrofuran and hydropyran rings with acetic anhydride, II, 439.
- and Hilly, G., Raney nickel applied to the hydrogenation of furancarboxylic acids, II, 173.
- Paul, W., constitution of pharmacologically useful purine derivatives in solution, II, 229.
- Paul, W. D. See Daum, K., and Smith, F. M.
- Paula, R. D. de G., carpotoside, a new glycoside or heteroside from sapucainha (*Carpotrache brasiliensis*, Endl.), II, 300.
- Paulais, R. See Brooks, G.
- Pauli, R., new geometrical optical illusion (the sector-illusion), III, 753.
- Pauli, R. H. See Coburn, A. F.
- Pauli, W., Hoff, W., and Lichstenstern, F., purified palladium sols prepared by electric sparking, I, 563.
- Szper, J., and Szper, S., structure and properties of highly purified reduction gold sols, I, 521. Chemistry of colloid-colloid reactions. VIII. Mechanism of protection by higher carbohydrates, I, 610.
- and Zentner, H., chemistry of colloid-colloid reactions. VII. Highly purified protected Sb_2S_3 sols, I, 563.
- Paulian, D., Bistriceanu, I., and Fortunesco, C., autonomic imbalance in hemiplegia, III, 667.
- Fortunesco, C., Cardas, M., and Chiliman, M., paralysis due to antirabies treatment, III, 828.
- Pauling, L., interatomic forces in metals, I, 63.
- and Niemann, C., structure of proteins, II, 461.
- Springall, H. D., and Palmer, K. J., electron-diffraction investigation of methylacetylene, dimethylacetylene, dimethyldiacetylene, methyl cyanide, diacetylene, and cyanogen, I, 306.
- See also Brasseur, H., Hampson, G. C., and Schomaker, V.
- Pauly, A. J. See Bourne, W.
- Paulmann, F. K., substance in seedlings which promotes growth and cell-division, III, 535.
- Paulsen, I. A. See Zvjagintzev, O. E.
- Paulsen, O., Raman effect. XCVII. Poly-substituted benzene. XII. *para*-Derivatives, I, 403.
- and Reitz, A. W., local sensitivity differences in the layers of photographic plates, I, 153.
- See also Kohlrausch, K. W. F.
- Paulson, M., bowel antigen, III, 796.
- Pautsch, F., significance of the neural tube and dorsal chorda for tail development of the tadpole, III, 111.
- Pavlik, B., can crystals of lower symmetry also be excited piezoelectrically in a simple way? I, 459.
- Pavlov, B. V., viscero- and cutaneo-visceral cardiac reflexes in *Helix pomatia*, III, 456.
- Pavlovskaja, L. D. See Lichoscherstov, M. V.
- Paxton, H. See Mason, L. S.
- Payne, L. F. See Hughes, J. S.
- Payne, S. A., and Shelton, E. K., effect of an anterior pituitary sex fraction on the development of the human uterus, III, 56.
- Payne, W. See Seymour, W. B.
- Payne, W. W., proferin, a new diabetic food, III, 161.
- Peabody, W. A., and Fisher, R. S., sulphate titration; use of tetrahydroxyquinone in a semimicro-method, I, 95.
- Peacock, M. A., graphical method for determining the spacings of lattice planes, I, 129. Goldschmidtine, a new silver antimonide, I, 344, 498.
- Peacock, P. R., and Beck, S., influence of intravenous injections of 3:4-benzpyrene colloid on the growth of transplanted mouse squamous carcinoma 2146, III, 281. Rate of absorption of carcinogens and local tissue reaction as factors influencing carcinogenesis, III, 396.

- Peacock, R., Meniere's syndrome, III, 135.
- Peacock, S., Bigler, J. A., and Werner, M., scarlet fever, hæmolytic streptococcal cultures, and Dick tests in children's hospital, III, 1102.
- and Knowlton, K., alkaptonuria, III, 1079.
- Pearce, A. F. See Broadway, L. F.
- Pearce, G. W. See Ayens, A. W.
- Pearce, J. A. See Munro, L. A.
- Pearl, F. L., celiac ganglionectomy and plexus resection for tabetic gastric crises, III, 667.
- Pearl, I. A., and Dehn, W. M., halogenoacetylcarbamides, II, 410.
- Pearlman, M. D., and Limarzi, L. R., correlation studies of basophilic aggregation and reticulocytes in various clinical conditions, III, 115.
- Pearlman, W. H., and Wintersteiner, O., æstrogens with oxygen in ring B. I. 7-Keto- and 7-hydroxy-æstrone, II, 510.
- Pearsall, W. H., and Billimoria, M. C., influence of light on nitrogen metabolism in detached leaves, III, 1016.
- Pearse, H. E. See Lawrence, J. S.
- Pearson, E. See Casey, A. E.
- Pearson, G. See Clow, A.
- Pearson, G. L., formation of metallic bridges in separated contacts, I, 50.
- Pearson, H. E. S., fatal agranulocytosis after sulphanilamide, III, 647.
- Pearson, P. B., nicotinic acid content of the blood of mammalia, III, 921.
- Schmidt, H., and Mackey, A. K., effect of a pellagra-producing diet on herbivora, III, 994.
- Pearson, R. W. See Truog, E.
- Pearson, T. G. See Barrow, R. F., and Glazebrook, H. H.
- Pease, D. C., and Kitching, J. A., influence of hydrostatic pressure on ciliary frequency, III, 1062.
- Pease, R. N., kinetic theory of gases. I, 1, 461. Experimental basis for the theory of quasi-unimolecular reactions, I, 614.
- See also Day, R. A., jun., Echols, L. S., and Morris, J. C.
- Peat, J. See Haworth, W. N.
- Peat, S., Schlüterer, (Miss) E., and Stacey, M., polysaccharides. XXIX. Constitution of the dextran produced from sucrose by *Leuconostoc des-transicum*, II, 246.
- and Wiggins, L. F., behaviour of anhydromethylhexosides towards alkaline reagents; preparation of derivatives of 3-aminoglucose and 2-aminoaltrose, II, 7.
- See also Cutler, W. O., Hands, S., Haworth, W. N., and Lake, W. H. G.
- Pecciarini, A. M., heat- and cold-receptors in the intact guinea-pig, III, 127.
- Pecciarini, E. See Mancini, M. A.
- Pechukas, A. See Johnson, Warren C.
- Peck, E. C., and Wegman, M. E., comparison of the Vollmer tuberculin patch test with purified protein derivative, III, 1104.
- Peck, E. R. See Fisher, R. A.
- Peck, R. L., and Hauser, C. R., pathogenic fungi. I. The lipins of *Blastomyces dermatitidis*. II. Lipins of *Monilia albicans*, III, 102, 522.
- Peck, S. M., and Rosenfeld, H., effects of p_H , fatty acids, and vitamin-C on growth of fungi, III, 200.
- Peckham, C. H., statistical studies on prematurity. I. Incidence of prematurity and effect of obstetrical factors. II. Mortality of prematurity and effect of obstetrical factors, III, 60.
- Pecora, L. J. See Talbot, J. H.
- Pedely, W. H. See Hilditch, T. P.
- Pedersen, K. J., ionic equilibria in aqueous solutions of magnesium oxalate, I, 79.
- Solubility of calcium oxalate in aqueous solutions of carbamide, I, 195.
- Pedersen, K. O., protein molecule, III, 785.
- See also Boestad, G., and Seibert, F. S.
- Pedersen, S. See Collier, F. A.
- Pedersen-Bjergaard, K., æstrogenic substances, III, 685.
- Pedlow, G. W., jun. See Whitmore, F. C.
- Peck, C. McI. See Snyder, C. D.
- Peel, A. A. F., significance of electrocardiograms showing a "second positive wave of QRS" in lead 3, III, 559.
- Peer, L. A., fate of buried skin grafts in man, III, 955.
- Peers, J. H., response of central nervous system to application of carcinogenic hydrocarbons. I. Dibenzanthracene, III, 697.
- Peet, M. M. See List, C. F.
- Peffer, O. H. P., hæmolytic anæmias, III, 228.
- Peierls, R., minimum property of free energy, I, 63.
- See also Bethe, H. A., and Bohr, N.
- Peigné, L. See Carré, P.
- Peiper, A., relation between sucking and respiratory centres in the human suckling, III, 460.
- Peirce, A. W., toxicity of fluorine for sheep, III, 415.
- Peitmann, capacity for work after cardiac suture, III, 557.
- Péju, L. See Lemarchands, M.
- Pekar, S. I., distribution of electron velocities in the plasma of discharge, I, 230.
- Pelliccia, G., white cell count after tonsillectomy, III, 890.
- Pellier. See Grimbarg, A.
- Pellissier, G. E. See Mason, C. W.
- Pelmore, D. R., dielectric loss due to polar molecules in solid paraffin wax, I, 551.
- Pelt, A. J. van, jun., application of high temperatures in preparative organic work, II, 492.
- Peltola, E., hydrolytic decomposition of butter fat with pancreatic lipase, III, 517.
- Pelz, W. See Neunhoeffer, O.
- Pemberton, R. See Scull, C. W.
- Pence, L. H., and Winter, H. C., purification of *p*-acetamidobenzenesulphonyl chloride, II, 542.
- Pencharz, R. I. See Evans, H. M.
- Pende, N., hyperthymism of adolescents, III, 376. Surgical treatment of essential hypertension, III, 561.
- Pendl, E., Reitz, A. W., and Sabathy, R., Raman effect. XCV. Nitrogen compounds. XII. (Nitro-group), I, 121.
- Penet, G. See Dumazert, C.
- Penfold, W., cerebral cortex in man. I. Cerebral cortex and consciousness, III, 247.
- Sántha, K. von, and Cipriani, A., cerebral blood flow during induced epileptiform seizures in animals and man, III, 1038.
- Penfold, A. R., Ramage, G. R., and Simonsen, J. L., 1- Δ^3 -carene-5-6-epoxide, a constituent of the oil from *Zieria smithii*, II, 514.
- and Simonsen, J. L., constitution of eremophilone, hydroxy- and hydroxy-dihydro-eremophilone. III, II, 117.
- See also Baker, W.
- Peniston, Q. P., McCarthy, J. L., and Hibbert, H., reconversion of an "extracted" lignin into its primary building units, II, 172.
- Penner, A., and Bernheim, A. I., acute postoperative enterocolitis, III, 842.
- Acute postoperative œsophageal, gastric, and duodenal ulcerations; relation to shock, III, 985.
- Penner, B. J. See Swann, H. G.
- Penney, W. G., and Kynch, G. J., magnetic susceptibility and related properties of rare-earth crystals, I, 308.
- See also Lloyd, E. H.
- Penning, F. M., movement of electrons in homogeneous electric and magnetic fields, I, 356.
- Pennycuik, S. W., composition of the colloidal platinum micelle, I, 521.
- and Woolcock, C. E., colloidal impurities in distilled water, I, 416.
- Woolcock, C. E., and Cowan, R. J., variations in the behaviour of paretic cerebrospinal fluids with different types of gold sols, III, 253.
- Penquite, R. See Heller, V. G.
- Penso, G., effect of peptone on activity of tetanus toxin, III, 333.
- Penston, N. L., physiological importance of mineral elements in plants; variations in potassium content of maize leaves during the day, III, 881.
- Penta, F., stereochemistry and classification of silicates, I, 542.
- See also Malquori, G.
- Pentschew, A., effect of parenteral administration of tellurium on the alimentary tract, III, 416.
- Peoples, J. A., jun. See Green, J. B.
- Pepinsky, R. See Phemister, D. B.
- Peppel, W. J. See Marvel, C. S.
- Pepper, D. S. See Flippen, H. F.
- Pepper, J. K. W., and Royle, H., progesterone and the nasal mucosa, III, 686.
- Pepper, J. R., and Stour, M. L., intra-peritoneal use of bovine amniotic fluid, III, 418.
- Pepper, W. P. See Baly, E. C. C.
- Pepple, A. W. See Kile, R. L.
- Péquignot, H. See Bénard, H.
- Peragallo, I., and Fiori, E., hæmopoietic activity of vitamin-E, III, 292.
- Perakis, N., magneto-chemical analysis of the sea-urchin (*Echinus melo*) egg, III, 718. Cellular division in a magnetic field, III, 869.
- and Capatos, L., magnetochemistry of mixed crystals, I, 412.
- See also Karantassis, T.
- Peralta Ramos, A., and Colombo, E. O., effects of testosterone propionate, III, 54.
- Percival, E. G. V., and Forbes, I. A., 3:6-anhydro-l-galactose in agar, II, 142.
- Somerville, J. C., and Forbes, I. A., isolation of an anhydro-sugar from agar, II, 142.
- See also Heddle, W. J.
- Percival, F. G., Noamundi iron mine, I, 586.

- Perdrau, J. R., persistence of the virus of herpes in rabbits immunised with living virus, III, 105. Ammonium molybdate as a mordant for Mann's stain and Weigert-Pal method, III, 809.
- Perdreau, H. See Tiollais, R.
- Pereira, J. See Galvao, P. E.
- Pereira, R. S., spectrophotometric determination of phosphoric acid by means of the coeruleo-molybdic reaction of Denigès, III, 886.
- Pereiras, R. See Castellanos, A.
- Perel, L. See Binet, L.
- Peretti, G., and Manca, B., parathyroid hormone and physico-chemical equilibrium of blood-calcium and -phosphorus. I. Electrophoresis of calcium and phosphorus of serum dialysate of parathyroidectomised dogs, III, 680.
- Perey, (Mlle.) M., element 87 derived from actinium, I, 170.
- and Lecoq, M., β -spectrum of actinium-K, I, 591.
- Pérez, J. P., twins of α -quartz obtained after temporary conversion into the β -form, I, 553.
- Perez, M., function of the adrenal glands, III, 139. Cicatrization in regions deprived of sympathetic nervous control, III, 969.
- Pergola, A. See Leroux, R., and Maranon, G.
- Périer, E. See Courmont, P.
- Perini, D. See Chiorazzo, C.
- Peris, K., photometric determination of root-permeability in intact plants, III, 210.
- Perla, D., prevention of toxic manifestations of an excess of vitamin-B₁ by supplements of manganese to the diet, III, 494. Relation of hypophysis to spleen. III. Hypophysectomy and resistance to *Trypanosoma lewisi*, III, 907. Excess of salt and resistance to histamine in rats, III, 1086.
- and Biller, S. B., haemoblastic sarcoma (primitive red cell type) following polycythæmia vera, III, 646.
- and Sandberg, M., electrolyte disturbance and resistance to histamine in rats, III, 1086.
- See also Sandberg, M.
- Perley, A. M. See Barnett, H. L., and Hartmann, A. F.
- Perley, G. A., antimony electrode for industrial hydrogen-ion measurements, I, 492. Characteristics of the antimony electrode, I, 492. Detection of small traces of copper using the antimony electrode, I, 578. Measurements with the dropping mercury electrode, I, 581.
- Perlich, R. W. See Sandell, E. B.
- Perlitz, H., and Aruja, E., [crystal] structure of the intermetallic compound NaAu₂, I, 185.
- See also Aruja, E.
- Perlman, D. See Levitz, M.
- Perlman, H. H. See Pillsbury, D. M.
- Perlman, I., and Chaikoff, I. L., radioactive phosphorus as an indicator of phospholipid metabolism. V. Mechanism of action of choline on liver of the fat-fed rat. VII. Effect of cholesterol on phospholipid turnover in liver. VIII. Effect of betaine on phospholipid activity of liver, III, 297, 771, 1079.
- Perlmann, (Miss) G. See Lipmann, F.
- Perlow, S., vasodilating action of prostigmine, III, 712.
- Permjakov, V. M., determination of at. wt. of lead by the Richards-Hönigschmid method. I. Preparation of chemically pure silver as a standard for determination of at. wt. of lead. II. Preparation of pure lead chloride, I, 292, 427.
- Péronnet, and Rémy, R. H., use of hydrogen sulphide in acetone, II, 534.
- Perotti, A., reactions of diethylmalonylurea and pyrazolone derivatives, II, 566.
- Peroval, A. P., mutual solubility in the system K₂SO₄-H₃BO₃-H₂O, I, 201.
- Perquin, L. H. C., factors determining metabolism of *Aspergillus niger*, III, 627.
- Perreau, P. See Loeper, M.
- Perrelli, S., effect of tannin in vegetable juices on Tillmans' method of determining ascorbic acid, III, 769.
- Perret, A., and Perrot, R., reductions by alkali cyanides and their relations with the equilibrium cyanide-cyanamide, I, 153.
- Perret, P. E. See Demole, M.
- Perreu, hydrates of manganous sulphate, I, 533. Hydrates of manganous sulphate, I, 575.
- Perrier, A., visible demonstration of ferromagnetic mosaic structure, I, 361.
- and Favez, H., initial susceptibility in presence of transverse magnetisation, I, 186.
- and Mermod, C., magneto-electrolytic anisotropy, I, 13.
- Perrier, C., and Segrè, E., some chemical properties of element 43. II., I, 3, 231.
- Perrier, F., residual ionisation of gases submitted to the action of radioactive substances, I, 442.
- See also Reboul, G.
- Perrier, M. I., use of liquid amalgams in the analysis of nitro-derivatives of benzene homologues, II, 13.
- and Lobunetz, M. M., reduction of nitronaphthalene with liquid zinc amalgam, for determination of nitro-groups, II, 14.
- Perrin, F., calculations relative to the eventual conditions of the chain transmutation of uranium, I, 351. Conditions of chain transmutation of uranium, I, 398.
- Perrin, M. B. See Fraser, R. H.
- Perrin, M. W., polymerisation of hydrocarbons, II, 466.
- Perrot, R. See Perret, A.
- Perrottet, E. See Briner, E.
- Perrottet, P. See Chanoz, M.
- Perry, C. A., and Petran, E., double poured blood plates in examination of throat and nose cultures for hæmolytic streptococci, III, 630.
- See also Hac, L. R., Myers, R. M., and Petran, E.
- Perry, C. B., relationship between acute rheumatism and streptococcal anti-fibrinolysin, III, 527. Persistent conduction defects following diphtheria, III, 744.
- Perry, H. O. See Smith, L. I.
- Perry, I. H., occurrence of positive vaginal smears in spayed mice, III, 263. Estrogenic activity of 3:4-benzpyrene, III, 264.
- and Lockhead, M. S., experimental production of adenoma of pituitary, III, 676.
- Perry, L. H. See McBain, J. W.
- Perry, T. M., carbon tetrachloride poisoning; stages of hepatic damage and repair in man, III, 415.
- Perschke, V. K., and Lakedemonski, A. V., heat effect of partition between two phases, I, 373.
- and Tzeitlin, C. L., action of sulphuryl chloride on metals, I, 484.
- Persike, E. C., jun. See Butcher, E. O.
- Person, E. C., jun., and Glenn, F., experimental pancreatico-gastrostomy; method for conserving external secretions of pancreas, III, 842.
- Perssonius, C. J., and Sharp, P. F., adhesion of potato-tuber cells as influenced by temperature, III, 106. Permeability of potato-tuber tissue as influenced by heat, III, 106. Adhesion of potato-tissue cells as influenced by pectic solvents and precipitants, III, 948.
- Persoz, B., true specific heat [of platinum and] of nickel above the Curie point, I, 409.
- Perucca, E., thin metallic films. VII. Electrical conductivity. IV., I, 187.
- Perutz, M. F., radioactive nodules from Devonshire, I, 584. Absorption spectra of single crystals of hæmoglobin in polarised light, III, 785.
- and Seligman, G., crystallographic investigation of glacier structure and the mechanism of glacier flow, I, 584.
- Peruzzi, P., acetylcholine-esterase activity of tissues and organs of guinea-pigs, III, 394.
- and Colombini, N., reactivity of dorsal muscle of leech at certain periods of the year, III, 126.
- Pervova, E. J. See Juriev, J. K.
- Pescatore, J. A. See Digilio, V. A.
- Pescatore, M., is creatinuria the result of an interference with the action of arginase? III, 98.
- Pescetto, F. See Serrati, A.
- Peschiera, C. See Piéry, M.
- Peschke, W. See Kindler, K.
- Pesez, M., specific test for nitrates, I, 384. Colorimetric micro-determination of nitrates, I, 624. Colour reactions of barbiturates. IV. Reaction of barbiturates with a polymethylene ring, II, 44.
- Peshkin, M. M., and Landay, L. H., cutaneous reactions to tobacco antigen in allergic and non-allergic children with direct and indirect (local passive transfer) methods of testing, III, 781.
- Pesina, A. G., synthesis of 4-methyl-5- β -hydroxyethylthiazole and its homologues, II, 563.
- Pessin, L. J., effect of soil moisture on rate of growth of longleaf and slash pine seedlings, III, 211.
- Pesta, H. See Dworacek, E.
- Pete, A. G., and Del Carlo, E. A., system calcium chloride-sodium benzoate-water, I, 146.
- Peter, F. See Reiss, M.
- Peter, H., preservation of vitamin-C in test materials, III, 168.
- Peter, W. See Eggers, H.
- Pèterà, T., and Maleci, O., volume of ganglionic cells, III, 29.
- See also Buchthal, F.
- Péteri, E., vitexin, II, 555.
- Petering, H. G., and Daniels, F., determination of dissolved oxygen by means of the dropping mercury electrode, with applications in biology, I, 38.
- Peterlin, A., viscosity of dilute solutions and suspensions in relation to particle form, I, 136. Determination of the size and axial relations of ellipsoidal solid particles from the internal friction of dilute suspensions, I, 196.

- Peterlin, A., and Stuart, H. A., determination of size and form, also the electrical, optical, and magnetic anisotropy, of submicroscopic particles by means of induced double refraction and internal friction, I, 318. Theory of double refraction in flowing solutions of colloids and large molecules, I, 318.
- Peters. See Friedrich.
- Peters, B. A. See Cooper, K. E.
- Peters, C. See Brill, R.
- Peters, C. A., MacMasters, M. M., and French, C. L., hydrogen peroxide in the colorimetric determination of iron by thiocyanate, I, 578.
- Peters, D. See Butenandt, A.
- Peters, F. See Manegold, E.
- Peters, G. See Thauer, R.
- Peters, H. G., and Visscher, M. B., mechanism of active absorption from the intestine, III, 387.
- Peters, H. R., and Sacks, M. S., poisoning from synthetic organic hair dye, III, 866.
- Peters, R. A., catatorulin test for vitamin-B₁, III, 74.
- and Rossiter, R. J., thyroid and vitamin-B₁, III, 850.
- and Wakelin, R. W., dissociating power of salts of fatty acids, III, 194.
- See also Banga, I., Long, C., and Ochoa, S.
- Petersdorff, H. J. von. See Steinkopf, W.
- Petersen, W. E. See Kelly, P. L., and Wise, G. H.
- Petersen, W. F., and Mayne, A., scarlet fever and the meteorological environment (Chicago records 1934—35), III, 332.
- Peterson, J. M. See Peterson, J. N.
- Peterson, J. N., Peterson, J. M., and Startup, C. W., miners' dyspnoea, III, 240.
- Peterson, P. D., and McKinney, H. H., influence of four mosaic diseases on plastid pigments and chlorophyllase in tobacco leaves, III, 536.
- Peterson, V. E., and Turner, C. W. [with Ralston, N. P.], energy content of goat milk, III, 1065.
- See also Houchin, O. B., and Reineke, E. P.
- Peterson, W. H. See Christensen, W. B., Nagy, R., Olson, F. R., Phelps, A. S., Quackenbush, F. W., Snell, E. E., and Woolley, D. W.
- Peterson, W. J. See Whitnah, C. H.
- Pether, G. C., ammonium chloride and lime injuries to the eye, III, 574.
- Petiau, G., densities of average magnitude attached to the Dirac electron in the plane monochromatic wave, I, 56.
- Petin, N. N. See Golombik, M. S.
- Petit, G., mechanism of the attack of trimethylarsine and some quaternary arsonium salts by sulphuric acid, II, 471.
- Petke, F. E. See Kienle, R. H.
- Petragnani, G., control of vitamin-active products in Italy, and regulations for their sale, III, 284. [Rickets in Italy], III, 291.
- Petran, E., use of serum tellurite agar for isolation of pneumococci, III, 795.
- and Perry, C. A., routine use of concentration and culture methods for detection of tubercle bacilli in microscopically negative sputa and other body fluids, III, 431.
- See also Perry, C. A.
- Petras, J. F. See Müller, R. H.
- Petravicz, W. P., effect of alcohol on white rats, III, 313.
- Petreanu, I. See Radulescu, D.
- Petrén, T., quantitative studies of the capillaries of central nervous system of the guinea-pig, III, 250. Capillaries of the motor area of the brain of the guinea-pig, III, 250. Daily variations of glycogen in liver of guinea-pig, III, 843.
- See also Alsén, S., and Bengtsson, G.
- Petrenko, B. G., and Rubinstein, B. E., diffusion processes in binary crystalline systems, I, 559.
- Tscherkaschine, E. E., and Ermolaeva, E. V., potential of lead-cadmium alloys, I, 421.
- See also Laschko, N. F.
- Petri, S., Norgaard, F., and Bandier, E., effect of nicotinic acid on pellagra following gastrectomy, III, 603.
- Norgaard, F., and Bing, J., pathological changes produced by gastrectomy in young swine, III, 62.
- Petri, W. See Schopf, C.
- Petrie, A. H. K., protein synthesis in plants, III, 635. Intake of ions by carrot tissue at different pH , III, 730.
- Watson, R., and Ward, E. D., physiological ontogeny in the tobacco plant. I. Drifts in dry weight and leaf area in relation to phosphorus supply and topping, III, 948.
- and Williams, R. F., physiological ontogeny in plants and its relationship to nutrition. V. The effect of nitrogen and phosphorus supplies on the respiration rate of the leaves, III, 339.
- and Wood, J. G., nitrogen metabolism of plants. III. Effect of water content on relationship between proteins and amino-acids, III, 339.
- See also Wood, J. G.
- Petrosini, G. See La Rotonda, C.
- Petrov, A. D., action of secondary and tertiary magnesium alkyl halides on esters and salts of acids, II, 251.
- Baidanov, A. D., Zakotin, N. N., and Suntzov, P. I., synthesis and properties of β -phenylacetone, ϵ -phenylnonane, and η -phenyltridecane, II, 411.
- and Schukin, V., isomeric transformation of n -hexene into β -methyl- 4β -pentene, II, 466.
- and Tscheltzova, M. A., cracking of hexadecane under pressure, II, 295.
- and Vjachirev, D. A., electrolysis of potassium tigliate, II, 467.
- Petrov, I. See Passinski, A.
- Petrov, I. R., and Bogomolova, L. G., significance of sensitisation of the organism in development of complications following transfusion of incompatible blood, III, 354. Pathogenesis of circulatory disturbances in anaphylactic shock, III, 364.
- Petrov, S., Burstein, R., and Kisseleva, P., adsorption of cations on platinised charcoal in a hydrogen atmosphere, I, 608.
- Petrovskaja, B., broncho- and vaso-motor responses of guinea-pig lungs, III, 747.
- Petrovskaja, K. A., analysis of growth and cell-division in tissue cultures, III, 644.
- Petrovski, B. V., treatment of surgical shock, III, 364.
- Petrow, V. A., steroids and related compounds. III. Constitution of Westphalen's diol, II, 367.
- See also Ellis, B.
- Petrunkin, M. L. See Georgievskaja, L. M.
- Petrunkina, A. M., and Petrunkina, M. L., state of chlorine in whole grey matter of human brain, III, 970.
- See also Georgievskaja, L. M.
- Petrunkina, M. L. See Petrunkina, A. M.
- Petrzilka, V. See Curran, S. C.
- Pett, L. B., rapid visual test for vitamin-A deficiency, III, 400.
- Lipkind, M., and LePage, G. A., vitamin-A in ling cod-liver oil, III, 1069.
- Pette, J. W. See Beynum, J. van.
- Pettengill, B. See Vosburgh, W. C.
- Petterson, A., immunising action of the negative chemotactic (negatactic) substance with special reference to the immunity against pyogenic staphylococci, III, 1102.
- Petterson, H., Gross, F., and Koczy, F., large-scale plankton culture, III, 1098.
- See also Foyn, E.
- Pettit, M. D. See Graham, W. A.
- Petty, M. J., salyrgan in the reduction of localised traumatic oedema, III, 82.
- Peukert, L., and Schneider, W., methods of testing the wetting power of liquids for the living human skin, III, 1094.
- Peursem, R. L. van. See under Van Peursem, R. L.
- Pevni, N. I. See Adadurov, I. E.
- Pevtsov, G. A., volumetric determination of vanadium in presence of tungsten, with diphenylaminesulphonic acid as indicator, I, 42. Volumetric determination of tin and antimony present together, I, 158.
- Pevzniak, R. M. See Bruevitz, S. W.
- Peyron, A., distinctive features of, and the co-existence in the human testicle of, two different tumours: seminiferous epithelioma and embryoma of multiple tissues, III, 991.
- Bonnard, A., and Lafay, B., genital glands and regional organisation in embryomata of twin origin, III, 979.
- and Poumeau-Delille, G., origin and development of melanoblasts in Shope papillo-epithelioma, III, 598.
- Poumeau-Delille, G., and Mercier, P., histiocyte reaction to experimental staphylococcal infections, III, 5.
- Peyronel, G., existence, properties and crystal structure of $Pb^{IV}P_2O_7$, I, 427.
- Peyssonneau, J., impregnation of the organism by dust. V. Siliceous impregnation of normal lung. VI. Fate of siliceous dust administered by intratracheal route, III, 316.
- Pezard, A., enumeration of Purkinje cells in cerebellum of birds, III, 749.
- Pezzini, M. See Guercio, F.
- Pezzini, Z. M. See Dobrovolskaia-Zavadskaja, N.
- Pfaff, A. See Pummerer, R.
- Pfaffenbichler, R., action of prontosil in scarlet fever, III, 81.
- Pfaffmann, C., afferent impulses from teeth, III, 568. Specific gustatory impulses, III, 901.
- Pfahler, F., effect of heteroauxin on growth of intact plants, III, 437.
- Pfaltz, H. See Demole, V.
- Pfanhauser, J., and Kalinski, T. J., precipitation with hydrogen sulphide in closed vessels, I, 341.
- Pfankuch, E., and Kausche, G. A., production, properties, and determination of tobacco-mosaic and potato-X virus, III, 336. Inactivation by phosphates of plant viruses, III, 796. Preparation and characterisation of aucuba mosaic virus, III, 947.

- Pfankuch, E. See also Kausche, G. A.
 Pfannenstiel, A. See Spengler, O.
 Pfau, A. S., catalytic hydrogenation of vanillin; vanillylcresol, II, 313. Volatile plant substances. VII. Essential oil of the buds of *Populus trichocarpa*, Torr. et Gray, III, 218. and Plattner, P. A., volatile plant substances. VIII. Synthesis of retivazulene. X. Vetivones, the odoriferous constituents of oil of vetiver, II, 148, 331.
 Pfeiffer, C. See Roby, C.
 Pfeiffer, C. A., and Gardner, W. U., skeletal changes and blood serum-calcium level in pigeons receiving oestrogens, III, 57. See also Landauer, W.
 Pfeiffer, H. See Lintzel, W.
 Pfeiffer, H. H., determination of the molecular energy of protoplasm. V. Evaluation of Young's modulus of elasticity in drops of protoplasm, III, 195. Studies on *Chironomus* chromosomes with the polarising microscope, III, 644. Strain effects on cells *in vitro* investigated by means of double diffraction, III, 1024.
 Pfeiffer, P., and Bank, G. von, aminobenzylidenechromanones, II, 83. Chromenoquinolines and chromenobenzopyrylium salts, II, 90. and Blank, H., primary compounds in Grignard reactions, II, 360. and Glaser, H. [with Milz, exchange of amine residues in the internally complex salts of Schiff's bases, II, 479. and Schmidt, P., arylated chlorostibates and chlorostibanates, II, 192. Thielert, H., and Glaser, H., mutual replacement of metals in internally complex salts, II, 215. See also Glaser, H.
 Pfeningberger, R. See Hernler, F.
 Pfeuffer, L. See Bockemüller, W.
 Pfister, H. O., disturbances of the autonomic nervous system in schizophrenia, III, 131.
 Pfister, R. J. See Davey, W. P., and Whitmore, F. C.
 Pfesser, G., skin damage by ethylene bromide, III, 416.
 Pfützenreuter, J. See Hilpert, R. S.
 Pfuhl, W., mitotic division of hepatic cells in relation to the general problems of mitosis and amitosis, III, 271.
 Pfund, A. H., dispersion and transmission of methyl methacrylate polymeride, I, 556. Transparent and opaque screens for the near infra-red, I, 580.
 Pfundt, R. See Demeter, K. J.
 Phalnikar, N. L., and Nargund, K. S., synthesis and derivatives of α -diphenylglutaconic acid, II, 265.
 Pheasant, H. C. See Rockwell, H.
 Phelps, A. S., Johnson, M. J., and Peterson, W. H., carbon dioxide utilisation during dissimilation of glycerol by propionic acid bacteria, III, 725. Production and utilisation of lactic acid by propionic acid bacteria, III, 1099.
 Phelps, D., effects on uterine motility of urine excreted during normal labour, normal menstruation, and dysmenorrhoea, III, 586.
 Burch, J. C., and Ellison, E. T., effect of long-term injections of testosterone on the guinea-pig endometrium, III, 54. Survival, structure, and function of pituitary grafts in untreated rats and in rats injected with oestrogen, III, 981. See also Williams, C.
 Phelps, F. P. See Hockett, R. C.
 Phemister, D. B., Aronsohn, H. G., and Pepinsky, R., variation in composition of gallstones with degree of associated obstruction, III, 759.
 Phifer, L. D. See Thompson, T. G.
 Philip, B. R., comparison of colour-blind tests, III, 133.
 Philip, J. C., fog and mist from the physico-chemical standpoint, I, 468.
 Philip, N. M., adiabatic and isothermal compressibilities of liquids, I, 249.
 Philip, U. See Haldane, J. B. S.
 Philippe, M., stabilisation of toxigenicity of strains of *C. diphtheriae*, III, 794. See also Loiseau, G., and Nitti, F.
 Philippi, G. T., mol. wt., unimolecular layers, and general structure of proteins, I, 320.
 Philippoff, W., significance of viscosity in elucidation of structure of colloidal solutions, I, 76. See also Hess, K.
 Philpott, E., oxidase of dihydroxymaleic acid, III, 785. See also Banga, I., and Dautrebande, L.
 Philippov, M. See under Filippov, M.
 Philipps, R. V., development of tunica dartos muscle and testes, III, 888.
 Philippsborn, E. von. See Bayer, F. W.
 Phillips, C. G. See Liddell, E. G. T.
 Phillips, J. R., and Milliken, G., total thyroidectomy in treatment of angina pectoris, III, 361.
 Phillips, J. T. See Hopwood, F. L.
 Phillips, L. R., factors producing individual differences in dark adaptation, III, 1042.
 Phillips, L. W., spectra of potassium, calcium, scandium, and titanium, I, 289. and Kruger, P. G., deep terms in Co vi and Ni vii, I, 49. Spectra of scandium iv and scandium v and their relation to the spectra of the iso-electronic sequences starting with argon and chlorine, I, 49. See also Kruger, P. G.
 Phillips, M., chemical examination of the lignin-like substance from sporophores of *Fomes pini* (Thore), Lloyd (*Trametes pini* (Thore), Fr.), III, 218.
 Phillips, N. W. F. See Steacie, E. W. R.
 Phillips, P. See Foss, G. L.
 Phillips, P. H., preservation of bull semen, III, 1056. and Engel, R. W., histopathology of neuromalacia and "curled toe" paralysis in chicks fed low-riboflavin diets, III, 287. Neuromalacia associated with low riboflavin diets, III, 602. See also Engel, R. W., and Evans, R. J.
 Phillips, R. A., and Barker, S. B., insulin convulsions after removal of stellate ganglia, III, 262. and Robb, P. D., carbohydrate metabolism after hypophysectomy in rats, III, 973. See also Farr, L. E.
 Phillips, W. R., effect of boron on respiratory behaviour of tomatoes, III, 882.
 Phillis, E., and Mason, T. G., partition of mineral elements in the cotton plant. I. Nitrogen and phosphorus, III, 1016. See also Mason, T. G.
 Philpot, F. J., protein molecule, III, 785.
 Philpot, St. L., examination in the ultracentrifuge, II, 495. Flavoprotein from cow's milk; ultracentrifugalexamination, III, 157. Protein molecule, III, 785. Ultracentrifugal analysis, III, 1096, 1100.
 Philpot, J. St. L., and Small, P. A., effect of iodine and hypoidous acid on pepsin, III, 1097.
 Phipps, T. E. See Seifert, R. L. E., and Turnbull, D.
 Phisalix, M., absence of antigenic potency from white venom of vipers from Gers, III, 797.
 Pi, H. T. See Maxwell, J. P.
 Piacentini, V., and Bollettino, A., pulmonary ventilation and respiratory metabolism during muscular exercise in children, III, 78. and Guercio, F., respiratory metabolism of women during muscular work, III, 78. Effect of folliculin on basal metabolism of women, III, 78.
 Piana, P. See Ilari, G.
 Piankov, V. A., velocity of oxidation and vaporisation of mercury, and obtaining of impermeable films at its surface, I, 86.
 Piatt, J., morphogenesis of cranial muscles of *Aniblystoma punctatum*, III, 806.
 Piaw, C. S., absorption spectra of salicylic acid and its alkali-metal salts in aqueous solution, I, 354. Ultra-violet absorption spectra of salicylic acid and lithium salicylate vapours, I, 402.
 Piazzolo, G. See Freudenberg, K.
 Picado, C., and Rotter, W., changes of thyroid function during various immunological reactions, III, 476. Antithyrotropic substances in human serum, III, 840.
 Picard, C. W., Sharples, K. S., and Spring, F. S., structure of the triterpenes, II, 121. Triterpene resinols and related acids. VI., II, 382.
 Piccardi, G., new phenomenon of an electrical nature, I, 356.
 Piceini, G. M., [muscular] contraction by glycerol and its use as a test for glycerol in pharmaceutical liquids, III, 126.
 Picher, H. See Eisenbrandt, J.
 Pichler, A., anterior rachischisis, III, 155.
 Pichler, E., and Reisner, H., blood-cholesterol variations in disseminated sclerosis, III, 130.
 Pick, A. See Langendorf, R.
 Pick, E. P. See Feitelberg, S.
 Pick, H., colour centres in potassium chloride crystals with small additions of alkaline-earth chlorides, I, 352.
 Pickard, H. B. See Gucker, F. T., jun.
 Pickard, R., light threshold apparatus, III, 753.
 Pickels, E. G., practical speed-measuring devices for high-speed centrifuges, I, 45. New type of air bearing for air-driven high-speed centrifuges, I, 45. See also Biscoe, J., and Schmidt, Gerhard.
 Picker, M. See Rogatz, J. L.
 Pickering, G. W., high blood pressure in man, III, 239, 896. Headache, III, 834. and Prinzmetal, M., experimental hypertension of renal origin in the rabbit, III, 239.
 Pickett, (Miss) L. W., and McLean, M., dissociation of hydantoin, I, 200. See also Henri, V.
 Pickett, W. F., chlorophyll content of Wealthy and York apple leaves, III, 801.
 Pickford, M., inhibitory effect of acetylcholine on water diuresis in dog, and its pituitary transmission, III, 391.
 Pickford, R. W. See Smith, B. B.
 Pickhardt, O. C., and Bernhard, A., treatment of postoperative tetany with dihydrotachysterol [A.T. 10], III, 256.

- Pickwell, K. L., effect of alcohol intoxication and ether anaesthesia on resistance to pneumococcal infection, III, 313.
- Piech, T., and Nayder, T., refraction and dispersion of liquid phosphorus, I, 303.
- Piekara, A., thermal variation of magnetic birefringence of polar liquids, I, 303. Influence of molecular interaction on magnetic birefringence of polar liquids, I, 357. Theory of electric polarisation, electro-optical Kerr effect, and electric saturation in liquids and solutions, I, 551.
- Pielemeier, W. H., supersonic dispersion in air, I, 309.
- Pien, J., and Meinrath, H., resistance of ascorbic acid to heat, III, 1073.
- Piepoli, P., and Collari, N., tin-bearing deposits of Canali Serci (Villacidro; Iglesias), I, 437.
- Pierce, G. N. See McNaught, J. B.
- Pierce, H. B., Hartman, E., Simcox, W. J., Aitken, T., Meservey, A. B., and Farnham, W. B., blood chemistry in human trichinosis, III, 451.
- Pierce, J. A. See Keeney, E. L.
- Pierce, W. C., Torres, O. R., and Marshall, W. W., identification of lines in qualitative spectrographic analysis, I, 335.
- Piercey, A. G. A. See Boomer, E. H.
- Pieron, H., variations from law relating short exposure times and variable brightness to light threshold, III, 1043. and Segal, J., process of retroactive facilitation in tactile stimulation, III, 33. Electric activity of the nervous system in the siphon of *Mia*, III, 664. Variation in latent period and dissociation of initial negative wave and terminal positive wave in electroretinogram, III, 1041.
- Pierquin, L. See Lamy, M.
- Pierrart, G. See Paget, M.
- Pierre, M., De Boissezon, P., and Lombard, C., effect of sodium phosphate and calcium gluconate on parathyroid weight, III, 579.
- Pierron, P., preparation of lithium oxide and peroxide, I, 153. Action of bromine on anhydrous oxides of metals in the second column of the periodic classification table, I, 426. Action of bromine on alkaline-earth hydroxides in aqueous solution, I, 426. Action of bromine on mercuric oxide, I, 426.
- Pierson, G. G., use of mercurous chloride for the separation, detection, and estimation of easily-reduced elements, I, 220.
- Pierson, H., neoplasm of stomach in a folliculin-treated rabbit, III, 280.
- Pierucci, M., Baccarani, M., and Teggia, P., collector for hard X-rays, I, 339. and Barbanti-Silva, L., new types of electric arcs. II. Arcs with one electrode consisting of very varied fused non-metallic substances, I, 112.
- Piery, M., and Enselman, J., biochemical study of obesity and its therapy, III, 297.
- Enselme, J., Enselman, (Mme.) J., and Peschiera, C., biological effect of high altitude; blood changes, III, 770.
- Enselme, J., Peschiera, C., and Donjon, P., effect of a prolonged stay at a high altitude; liver and muscle changes, III, 758.
- Enselme, J., Peschiera, C., and Nova, M. A., effect of oxygen saturation of arterial blood on formation of lactic acid by striated muscle, III, 464.
- Piery, M., Martin, J. F., Enselman, J., and Peschiera, C., effect of prolonged stay at high altitudes; pulmonary changes, III, 824.
- Pies, R., and Wendt, H., hemeralogy and serum-vitamin-A, III, 701.
- Pietenpol, W. B. See Westerfield, E. C.
- Pietsch, G. See Böhme, H.
- Piettre, L., uniform reaction of the seedlings of garden cress to colchicine, III, 883.
- Piettre, M., preparation of crystalline oxyhaemoglobin at low temperatures, III, 813. Effect of water and electrolytes on crystalline oxyhaemoglobin at low temperatures, III, 813.
- Piffault, C., effect of X-rays on water, I, 330. See also Dognon, A.
- Piganiol, P. See Dupont, G.
- Piggot, C. S., radium in rocks. V. Radium content of the four groups of pre-Cambrian granites of Finland, I, 288.
- Pighini, G., comparative determination of choline-esterase in various parts of the nervous system, III, 750. Variations in choline-esterase content of brain of strychninised animals, III, 750. Choline-esterase in brain of vitamin-B₁-deficient pigeons, III, 851. Variations in choline-esterase in brain and medulla of tetanus-infected animals, III, 902.
- Pigman, W. W. See Helferich, B., and Isbell, H. S.
- Pigulevski, G. V., and Rubaschko, Z. J., catalytic hydrogenation of the oxides of unsaturated acids, II, 532.
- Pijoan, M. See Alexander, L., Rinkel, M., and Warren, H. A.
- Pikina, E. I., Talalaeva, T. V., and Kotscheschikov, K. A., tin organic compounds of the naphthalene series, II, 293.
- Pikler, L., reasons for using sour milk in infant nutrition, III, 397.
- Pilat, S., and Turkiewicz, N., preparation of [sodium] cyclopentylalkanesulphonates, II, 472.
- Pilati, L., statistical researches on growth of the human spinal ganglion nerve cells, III, 245. Size of human nerve cells at different ages, III, 665. See also Olivo, O. M.
- Pilcher, R., ephedrine and atropine in post-operative thrombosis and embolism, III, 613.
- Pilgerstorfer, W. See Boller, R.
- Pilitschenko, V. A. See Schemjakin, F. M.
- Pillemer, L., and Ecker, E. E., specificity of keratine derivatives, III, 295. Ecker, E. E., and Wells, J. R., specificity of keratins, III, 597. See also Ecker, E. E., and Wertheimer, D.
- Pillsbury, D. M., and Perlman, H. H., acetarsone therapy in 187 cases of congenital syphilis, III, 1088.
- Pinaevskaja, E. N. See Jatlov, V. S.
- Pincus, G., and Werthessen, N. T., maintenance of embryo life in ovariectomised rabbits, III, 265. Analysis of mechanism of oestrogenic activity, III, 479.
- Pincus, J. B., and Gittleman, L. F., infantile tetany; metabolism, I, 175.
- Pincus, P., enamel protein. III, 544. Human enamel-protein, III, 695. See also Glock, G. E.
- Pines, H., Grosse, A. V., and Ipatiev, V. N., reaction of paraffins with hexahydroaromatic hydrocarbons in presence of aluminium halides, II, 205.
- Pines, H., and Ipatiev, V. N., isomerisation of alkylcyclopentanes, II, 304. Synthesis of *tert*-butyl- and *tert*-amyl-cyclopentane and of intermediate products, II, 536. See also Ipatiev, V. N., and Kharasch, M. S.
- Piness, G. See Huber, H. L., and Ratner, B.
- Pink, H., stimulating effect of rectangular current pulses, III, 463.
- Pink, R. C., solubility of water in benzene solutions of ethanolamine oleate, I, 138. Water-in-oil emulsions. II. Interfacial and surface activities of magnesium and calcium oleates and role played by these soaps in stabilisation of water-in-oil emulsions, I, 317.
- Pinkerton, H., Beale, S. M., Warren, S., and Kielsing, A., effect of insulin therapy on transplantable tumours in mice, III, 281. and Bessey, O. A., loss of resistance to murine typhus infection resulting from riboflavin deficiency in rats, III, 1070.
- Pinkston, J. L., and Pinkston, J. O., changes in spleen size, blood pressure, and erythrocyte count after administration of benzedrine sulphate in dogs, III, 929.
- Pinkston, J. O. See Pinkston, J. L.
- Pinkus, A., and Hanez, P., influence of the method of preparation and physical structure of silver chloride on its solubility, I, 20. and Salomon, A., reciprocal displacement of electrolytes carried down by precipitates, I, 253.
- Pinkus, H., epidermal and sweat gland cells in culture, III, 347.
- Pinto, A. See Del Castillo, E. B.
- Pinto, S. S., excretion of sulphanilamide and acetylsulphanilamide in human milk, III, 303.
- Piontelli, R., influence of ultrasonics on the discharge potentials of hydrogen, oxygen, and chlorine, I, 14. Chemical kinetics, I, 325. Cathode phenomena in electrolysis of aqueous solutions of alkali salts or hydroxides, I, 424.
- Piontkovskaja, M. A. See Kortschagin, L. V.
- Piper, M. C. See Kepler, E. J.
- Piper, S. H. See Francis, F.
- Pipik, O., reaction of cyclopentane with sulphur dioxide solution, II, 305.
- Pipparelli, E. See Orri, A.
- Pirani, A. See Galamini, A.
- Pirenne, M. H., investigation of the SiHCl₃ molecule by X-rays, I, 185. Diffraction of X-rays by gas molecules; comparison with electron diffraction and discussion of results for SiHCl₃, I, 244. See also Debye, P.
- Pirie, A., chemical change occurring during the lysis of *Bact. coli* by bacteriophage, III, 796.
- Pirie, N. W. See Bawden, F. C., and Miles, A. A.
- Piriot, A. See Gillet, A.
- Pirn, E. J., use of dismenol in spastic conditions of the urinary tract, III, 713.
- Pirona, M. See Angeletti, A.
- Pirrone, F., and Vannucchi, R., constitution of cholesterol. XVI. Oxidation by peracetic acid, II, 504. See also De Fazi, R.
- Piša, A., binocular fields of vision in domestic animals, III, 837.

- Pisarenko, N. L., semi-conductors in strong electric fields, I, 404.
- Pisarijevskaja, E. L. See Zvjagintzev, O. E.
- Pisarska, H. See Malachowski, R.
- Pischinger, A. See Engelhart, E.
- Pishawikar, D. G. See Shah, S. V.
- Pisu, B., behaviour of the so-called "factor-R" on irradiation by Hertzian waves, III, 420.
- Pitkethly, R. C., and Steiner, H., mechanism of catalytic dehydrogenation and cyclisation, II, 465.
- Pitner, G. See Tanner, F. W.
- Pitschko, V. A. See Eru, I. I., and Prokopetz, E. I.
- Pitt, A. See Findlay, J. C.
- Pitt-Rivers, R. V. See Harington, C. R., and Neuberger, A.
- Pittman, M., protection of mice against *Haemophilus influenzae* (non-type-specific) with sulphapyridine, III, 1082.
- See also Branham, S. E.
- Pittman, M. S. See Kunerth, B. L.
- Pittorru, Q. See Bertino, S.
- Pitts, R. F., excretion of creatine by the dogfish, *Squalus acanthias*, III, 596.
- Pitzer, K. S., symmetry number and thermodynamic functions for molecules having double minimum vibrations, I, 310.
- Corresponding states for perfect liquids, I, 557.
- See also Latimer, W. M.
- Pizzarello, R. A., and Freudenberg, Werner, synthesis of l-galactose; structure of α - and β -diisopropylidenedulcitol, II, 202.
- Pizzolato, P., and Beard, H. H., creatine-creatinine metabolism and the hormones, III, 499.
- See also Beard, H. H.
- Placidi, L., and Poutiers, J., irretractible clotting of plasma, III, 960.
- See also Violle, H.
- Placzek, G. See Bohr, N.
- Plagge, J. C., vital importance of salivary glands to newborn rats, III, 386.
- Plain, G. J. See Herb, R. G.
- Plaksin, I. N., and Brechstedt, A. J., volatility of silver, in relation to the nature of the atmosphere, the temperature, and composition of binary silver alloys, I, 313.
- and Koshuchova, M. A., changes in the contact angle and in the wetting time in the electro-amalgamation of gold, I, 74.
- and Suvorovskaja, N. A., colorimetric determination of gold, I, 158.
- Plambeck, L., jun. See Marker, R. E.
- Planck, R. W. See Gucker, F. T., jun.
- Planet, N. See Bier, O.
- Plank, E., colorimetric determination of cerium, I, 387.
- and Urmanczy, A., mechanism of corrosion of thallium, I, 381. Aqueous corrosion of thallium, I, 426.
- Plank, R., critical state and a new general equation of state, I, 515.
- Plankenhorn, E. See Freudenberg, K.
- Planovski, A. N., heat of dilution of nitrating mixtures, and heat effect of nitration processes, I, 82.
- Plant, S. G. P., and Wilson, (Miss) A. E. J., structural problems in the indole group. III. Halogen compounds, II, 180.
- See also Beyts, N. M., and Huggill, H. P. W.
- Plantanida, M., action of ammonia on γ -substituted α -dibromopentane, II, 486.
- Plantefol, L., respiratory exchanges of plant-tissue cultures, III, 340.
- and Gautheret, R., glucose and respiration of plant-tissue cultures, III, 636.
- Plass, E. D. See De Gowin, E. L.
- Plass, M. See Adler, E.
- Plate, A. F. See Kazanski, B. A.
- Plate, K. H. See Criegee, R.
- Platen, E. S. See Hamilton, P. M.
- Platiel, M. See Durr, K.
- Platonov, M. S. See Krivoschlikov, N. F.
- Platou, E. S. See Sako, W.
- Platt, A. E., salt optima in agglutination, III, 330. *Haemophilus influenzae*. II. Two serologically active protein fractions isolated from Pfeiffer's bacillus, III, 726.
- Platt, A. P., dietary prevention of fatty livers; compounds related to choline, III, 500.
- Platt, B. C. See Kenyon, J.
- Platt, B. S., and Gin, S. Y., Chinese methods of infant feeding and nursing, III, 282.
- and Lu, G. D., metabolism of pyruvic acid in normal and vitamin-B₁-deficient states. IV. Accumulation of pyruvic acid and other carbonyl compounds in beriberi and effect of vitamin-B₁. V. Effect of exercise on blood-pyruvate in human vitamin-B₁ deficiency, III, 1078.
- Platt, S. S. See Kohn, R.
- Plattner, E. B., and Reed, C. I., muscular efficiency of rats injected with anterior pituitary growth factor, III, 1046.
- Plattner, P. A., amnesic syndrome after insulin-cardiazol treatment, III, 34.
- and Schreck, W., steroids and sex hormones. LV. Preparation of 3-hydroxy-pregnadiene-21-carboxylic acid and its hydrogenation products, II, 548.
- See also Pfau, A. S., and Ruzicka, L.
- Platz, B. R. See Quackenbush, F. W.
- Piatzek, P. See Hermans, P. H., and Krafky, O.
- Piazek, E., nitration of methyl homologues of pyridine, II, 226, 339.
- Sorokowska, A., and Tolopka, D., nitration of halogen derivatives of pyridine, II, 3a.
- Plenczner, A., high blood pressure in sportsmen and non-sportsmen, III, 457.
- Pleskov, V. A., technique of working with liquefied gases, I, 434.
- Pleśniewicz, S., diffusion coefficient of potassium molybdo-octacyanide and ferrocyanide, I, 250.
- Plessset, E. H., and Plessset, F. M., background fog in cloud chambers, I, 390.
- Plessset, F. M. See Plessset, E. H.
- Plessing, E., structure of polished metallic surfaces, I, 304. Examination of worked metal surfaces by means of electron interference, I, 459.
- Plessing, H. See Brintzinger, H.
- Pletenev, S. A., and Rozov, V. N., cathodic polarisation in electrolysis of molten salts, I, 84.
- Pletz, V. M., allylthiophosphoryl chloride, II, 240. Organic compounds of titanium, II, 251. Tetra-arylphosphonium chlorides, II, 291.
- Plewako, E. A., and Bakuschinskaja, O. A., agglutination of baker's yeast by *Lactococcus agglutinans*, II, 523.
- Plichet, A. See Pagniez, P.
- Plimmer, R. H. A., and Lawton, J. H. T., analysis of proteins. XI. Products of action of sodium hydroxide on caseinogen; composition of dephosphocasein (dephocasein), II, 294.
- Pliske, E. C., follicular cycle in sexually mature ground squirrel (*Citellus tridecemlineatus*, Mitch.), III, 806.
- Pliszka, F., agglutinins in carp, III, 876.
- Plötner, K. See Bürger, M.
- Ploetz, T. See Freudenberg, K.
- Plötze, E., electrical relaxation phenomena, I, 127.
- Plotnikov, V. A. [with Jakubson, S. I.], non-aqueous solutions. I. Conductivity tables, I, 83.
- and Barmaschenko, I., electrochemical investigation of the system aluminium bromide-ammonium halide-ethyl bromide, I, 266.
- and Dumarevskaja, V. M., electrochemical study of the system aluminium bromide-sodium bromide-ethyl bromide, I, 82.
- and Gratzianski, M. M., compound of aluminium bromide with benzene, I, 81.
- and Michailovskaja, V. I., physicochemical investigation of the systems bromine-pyridine and bromine-quinoline, I, 266.
- Plotz, M., Rothenberger, M., Ferguson, E., and Ginsberg, V., sodium ferrocyanide excretion in the determination of renal function, III, 693.
- Plüddemann, G. See Kindler, K.
- Plum, P., metabolism and cardiac output in normal and diphtheritic children, III, 1031.
- and Thomsen, S., monocytic leukaemia, III, 549.
- See also Sand, K., and Thomsen, S.
- Plummer, N., and Ensworth, H., use of sulphapyridine (M. & B. 693) in treatment of pneumonia, III, 774.
- Plunkett, R. J., and Evans, W. L., mechanism of carbohydrate oxidation. XXIV. Action of aldehyde-d-glucose and of aldehyde-d-galactose in alkaline solutions, II, 50.
- Pluvinage. See Auger, P.
- Plyler, E. K. See Cleaves, A. P.
- Pniewski, J., intensity distribution in "wings" of a Rayleigh line from carbon disulphide, chloroform, and carbon tetrachloride, I, 58.
- Pochil, P. F., mechanical properties of unimolecular layers (films) in liquid-liquid interfaces, I, 562.
- Silberman, T. J., and Talmud, D. L., kinetics of the formation and solvation of two-dimensional colloids, I, 73.
- See also Krasnova, T. A.
- Pochin, E. E., ocular effects of sympathetic stimulation in man, III, 834. Mechanism of lid retraction in Graves' disease, III, 834.
- Pochon, J., cellulolytic bacterial flora in the alimentary tract of xylophage larvae, III, 874. Relationship between the reduction of neutral-red and parasitism or saprophytism in *Streptococci*, III, 876.
- See also Cotoni, L., and Prévot, A. R.
- Pochvalenski, E. D. See Schischkin, N.
- Pockels, U. See Wittig, G.
- Podashevski, M. N., and Polonski, A. M., luminescence of alkali halide crystals, I, 180.

- Poddubni, V. P., inner photo-electric effect in potassium and sodium iodides by the action of ultra-violet radiation, I, 181. Photo-electric current in alkali halide crystals with *U* centres under illumination with visible and ultra-violet light, I, 181. Spectrum distribution of photo-electric currents in crystals of alkali halides with *U* centres, I, 181.
- Podeanu, A. P. See Mante, D.
- Podrovzek, V. See Kotliar, A. M.
- Poetsch, H. See Jenckel, E.
- Potzl, O., cerebral circulation, III, 660. See also Hoff, H.
- Pogangeanu, P., absorption spectra by the Hartley-Baly method of several hydrocarbons of condensed benzene nuclei: anthracene, pyrene, naphthacene, porylene, I, 353. See also Dima, G. A.
- Pogodaev, K. N., appliance for measuring magnetic transformations, with the aid of a lamp generator, I, 159.
- Pohjolainen, A. See Salmi, E. J.
- Pohl, A., prophylactic administration of prontosil in manual removal of the placenta, III, 592.
- Pohl, F. See Brockmann, H.
- Pohl, I. S., action of tonsils on growth of axolotl and fish, III, 695.
- Pöhl, R., growth inhibition of coleoptiles induced by growth-substance, III, 638.
- Pohl, R. W., discovery of Ohm's law, I, 342. See also Hilsch, R.
- Pohle, F. J., blood platelet count in relation to menstrual cycle in normal women, III, 549.
- and Heath, C. W., influence of acid and alkaline salts on the blood in hypochromic anaemia treated by iron parenterally, III, 811.
- and Meyer, O. O., inability to demonstrate platelet-reducing substance in acetone extract of spleen from patients with idiopathic thrombocytopenic purpura, III, 960.
- and Taylor, F. H. L., coagulation defect in haemophilia; the refractory phase following repeated injections of globulin substance derived from normal human plasma in haemophilia, III, 10.
- See also Lozner, E. L., and Stewart, J. K.
- Pohle, K., and Welke, K., analgesic effect of a veronal-pyrimidone mixture, III, 186.
- Pohlman, R., absorption of ultrasonic waves in human tissues and its dependence on frequency, III, 420.
- Richter, R., and Parow, E., distribution and absorption of ultrasonic waves in human tissues, III, 420.
- Pohlmann, J., is the radioactive potassium isotope stored in the organism? III, 502.
- Pohlner, A. See Wagner, R.
- Poirot, G. See Hérissay, H.
- Poje, J. A. See Brewster, R. Q.
- Pokrovskaja, E. S. See Nametkin, S. S.
- Pokrovski, V. A. See Gochshtein, J. P.
- Polaczek-Hättek, A. See Schmid, L.
- Polák, F., wittmatoporphyrin and its relation to pathogenesis of malignant tumours, III, 396.
- Polak, J. J., action of X-substance and testosterone on separate injection, III, 54.
- Poland, G. L. See Harris, P. L.
- Polanyi, M. See Evans, M. G., Greenhalgh, R. K., and Horrex, C.
- Polatin, P., Friedman, M. M., Harris, M. M., and Horwitz, W. A., vertebral fractures produced by metrazol-induced convulsions, III, 832.
- Polatos, G. See Ionesco, N. G.
- Poleff, L., human placenta as a nutritive tissue for ultraviruses, III, 878.
- Poleshaev, L. V., induction factors of the initial stages of extremity formation in amphibia, III, 807. Explanation of anlage of extremities, III, 807.
- Polessitski, A., distribution of radium-*D* between crystals and solutions of Ba(IO₃)₂, I, 71. Mechanism of distribution between liquid and solid phases, I, 138. Equilibrial distribution between solid and liquid phases, I, 139.
- Poletaev, I. See Klarfeld, B.
- Poley, W. E., utilisation of wheat and wheat by-products in feeding young chickens. IV. Ground wheat as a source of vitamin-B₂; unknown factors which affect plumage colour and structure. V. Protein supplements for ground wheat, III, 165. See also Moxon, A. L.
- Policard, A., pulmonary effects of zeolite inhalation, III, 513. Passage of minerals from lungs to pleura in man, III, 565. Relation of pneumoconiosis to tuberculosis, III, 620. Action of permutit on lung tissue, III, 717.
- and Rollet, J., effect of zeolites on conjunctiva, III, 971.
- Polinard, E., transformation of pyroxene-peridotites into rocks containing a predominance of silica and iron in the basin of Lulua and Bushimaie, I, 437.
- Polissar, N. J., kinetic approach to theory of conductance of infinitely dilute solutions based on the "cage" model of liquids, I, 82.
- Poljakov, M. V., mechanism of formation of hydrogen peroxide during the explosion and catalysis of "oxy-hydrogen," I, 151.
- and Korneieva, A. V., kinetics of slow combustion of methane at low pressures, I, 203.
- and Weinstein, F. M., mechanism of formation of peroxide and aldehyde in explosive oxidation of ethylene, I, 203. See also Elkenbard, A. G., and Neumark, E. J.
- Poljakov, V. D., and Ivanov, A. V., measuring electrical conductivity of solutions, I, 389.
- Poljakova, A. M., Preobrashenski, V. A., and Preobrashenski, N. A., synthesis of the alkaloid pilosinine, II, 564.
- Poljakova, E. M. See Jatlov, V. S.
- Poljakova, O. I. See Turova-Pollak, M. B.
- Polke, J., mandelic acid treatment of *B. coli* infections of urinary tract, III, 859.
- Poll, J. van de, and Westerdijk, T., hydrocarbon flame temperatures, I, 537.
- Pollacci, G., and Gallotti, M., Italian-grown *Digitalis lanata*, Ehrh., III, 713.
- Pollack, A., transport and metabolism of lipins in the liver under action of adrenaline, III, 484.
- Pollack, H., and Dolger, H., protein as a source of carbohydrate for patients using protamine-zinc-insulin, III, 295. Effect of fat on rate of availability of orally ingested carbohydrate, III, 299. Advantages of protamine-zinc-insulin therapy, III, 911.
- Pollack, M. A. See Hurd, C. D.
- Pollák, O. J., and Joel, C., morphology of human spermatozoa, III, 644.
- Pollard, A. G. See Sutherland, G. L.
- Pollard, C. B. See Bain, J. P.
- Pollard, E., Schultz, H. L., and Brubaker, G., transmutation of argon and chlorine by α -particles, I, 4. See also Brubaker, G.
- Pollard, W. G., use of surface states to explain activated adsorption, I, 552.
- Polles, C. See Lasausse, E.
- Pollia, J. A., possible carcinogenic effect of anthracene and chrysene and their compounds, III, 779.
- Pollitzer, G., the pulmonary diaphragm, III, 23.
- Pollmann, A. L. See Horn, F.
- Pollock, H. C., and Cooper, C. S., effect of pressure on the positive point-to-plane discharge in N₂, O₂, CO₂, SO₂, SF₆, CCl₂F₂, A, He, and H₂, I, 511.
- Pollock, J. H. See Hayward, S. J.
- Pollok, H. See Bergmann, M.
- Polly, O. L. See Rice, F. O.
- Polonovski, M., and Boulanger, P., influence of structure of amino-acids on their fate in the organism, III, 499.
- and Briskas, S., haemopoietic action of zinc, manganese, and nickel, III, 6. Role of copper and iron in regeneration of haemoglobin and red cells in experimental anaemia in rats, III, 116. Effect of metals on weight and fecundity of rats on deficient diet, III, 765. Effect of cobalt salts on anaemia in the dog, III, 890. Haemopoietic action of cobalt in deficiency anaemia in rat, III, 890.
- and Desgrez, P., reducing properties of a tautomeric form of geneserine; a chain reaction, II, 40.
- Desgrez, P., and Issartel, R., amino-acid and polypeptide content of blood following ligation of the ureters, III, 486.
- and Jayle, M. F., presence in blood plasma of a substance increasing the peroxidase activity of haemoglobin, III, 8. Specificity and biological function of animal peroxidases, III, 516.
- Jayle, M. F., and Glotz, G., mechanism of peroxidase activity of haemoglobin, III, 8. Spectrographic, colorimetric, and manometric study of action of peroxides on haemoglobin, III, 741.
- and Lindenberg, I., controlled sulphochromic oxidation of organic compounds containing oxygen, II, 466. Diffusion of non-electrolytic organic substances in the tissue-water of fishes. I. Diffusion of alcohols and ketones as a function of salt concentration in the external medium, III, 320.
- Polonski, A. M. See Podashevski, M. N.
- Polosin, V. A., and Schachparonov, M. I., polytherms of system KCl-KH₂PO₄-H₂O from -10.8° to 35°, I, 566.
- Polotzki, I. G., luminescence of water when subjected to ultrasonic vibrations, I, 301.
- Polson, A., diffusion constants of proteins, I, 369. Calculation of the shape of protein molecules, I, 455.
- Polujan, E. S. See Roiter, V. A.
- Polya, J. B. See Cook, A. H., and Haworth, E.
- Pombriaskinsky-Kobozieff, N. A. See Kobozieff, N.
- Pomerantz, L. See Kesten, H. D., and Mulinos, M. G.
- Pomerantz, M. A. See Johnson, T. H.

- Pomerat, C. M., respiration of the newt. II. Effect of temperature in hypophysectomised, immature, thyroidectomised, and pancreatectomised males, III, 1044.
- and Willmer, E. N., growth of tissues *in vivo*. VII. Carbohydrate metabolism and mitosis, III, 1077.
- Pomini, F. P., [pigmentation in] crosses of yellow and brown rainbow trout. I. Melanotic pigmentation of the skin. II. Melanotic pigmentation of the eye, III, 155.
- Pommerenke, W. T., and Bishop, F. W., amplification of foetal heart sounds, III, 17.
- See also Thompson, H. E., *jun*.
- Pona, G., and Muratori, F., mechanism of action of "veritol," III, 1087.
- Poncher, H. G., and Stubenrauch, C. H., *jun*., intradermal dye test for vitamin-C deficiency, III, 168.
- See also Hassin, G. B.
- Ponder, E., disk-sphere transformations of ovalocytes, III, 546. Effect of simple haemolysis in hypotonic systems, III, 552. Acceleration of haemolysis in relation to chemical structure, III, 1026.
- See also Abramson, H. A., and Fricke, H.
- Ponizovskaja, V. L. See Bruevitz, S. W.
- Ponomarev, V. D., and Gubelbank, S. M., properties of liquid amalgams, I, 606.
- Pons, C. A., and Julianelle, L. A., isolation of *Listerella monocytogenes* from infectious mononucleosis, III, 1012.
- See also Julianelle, L. A.
- Pons, R., is tetanus anatoxin a toxin which has lost its power of fixation by the nervous system? III, 206.
- Pontecorvo, B., soft radiation emitted on capture of neutrons by [atomic] nuclei, I, 53. Experimental results in nuclear isomerism, I, 547.
- and Lazard, A., nuclear isomerism produced by X-rays with a continuous spectrum, I, 173.
- Pontecorvo, G., allometric growth of the forelimb in cattle, III, 695.
- Ponthus, P., rôle of micellar hydration in the effect of ultra-violet rays on agar solutions, I, 417.
- Poo, L. J., Lew, W., and Addis, T., protein anabolism of organs and tissues during pregnancy and lactation, III, 607.
- Pool, M. L., and Cork, J. M., deutron bombardment of barium, lanthanum, and cerium, I, 5.
- Poole, M. W. See Hamil, B. M., and Munday, B.
- Poorten, F. H. ter, maldevelopment of the kidney in an adult, III, 442.
- Poos, F., pupil as test organ for pharmacological reactions, III, 418.
- Pop, A. See Spacu, G.
- Popa, S. See Rădulescu, D.
- Pope, C. G., action of proteolytic enzymes on the antitoxins and proteins in immune sera. I. True digestion of the proteins, III, 797.
- and Healey, M., photo-electric study of reactions between diphtheria toxin and antitoxin, III, 330. Preparation of diphtheria antitoxin in state of high purity, III, 1100.
- and Linggood, F. W., purification of diphtheria toxoid, III, 1100.
- and Stevens, M. F., determination of amino-nitrogen by a copper method, II, 398.
- Popesco, A. See Ionesco-Matiu, A.
- Popesco, C. See Ionesco-Matiu, A.
- Popesco, I. See Lupulesco, I. I.
- Popesco, M., cardio-vascular effects of urea, III, 964.
- Popesco, N. See Ionesco, N. G.
- Popier, A. See Jullien, A., and Latarjet, R.
- Popják, G. See Dudits, A.
- Popkin, A. H. See Whitmore, F. C.
- Popoff, N. W., epithelial functional rejuvenation in mucous cells of gastrointestinal tract and parietal cells of stomach, III, 688.
- Popov, B. V. See Izmailski, V. A.
- Popov, M. A., apparatus for production of gaseous ammonia, I, 224.
- Popov, P. G., determination of catalytic effect of traces of substances, I, 423.
- Popov, P. P., condensation of arsenic halides with hydro-halides of pyridine and quinoline, II, 561.
- Popov, V. I., pathogenesis and treatment of traumatic shock, III, 363.
- Popovici, G. See Rascanu, V.
- Popp, W. See Steinkopf, W.
- Poppen, J. L., effects of ligation of left anterior cerebral artery, III, 670.
- Popper, E. See Macarovici, C. G.
- Popper, H., and Brod, J., physiological variations in renal work, III, 274.
- Poppov, I. D., determination of lignin, III, 803.
- Pora, E. A. See Gradinescu, A.
- Porchet, B., *Torulopsis pulcherrima*, III, 100. Biology of yeasts producing alcoholic fermentation at low temperature, III, 520.
- Foremski, V. See Sannié, C.
- Poris, E. G., and Charipper, H. A., endocrines of reptiles. I. Morphology of pituitary gland of lizard (*Anolis carolinensis*), III, 737.
- Porri, R., and Rowinski, P., metabolism of sorbitol, III, 855.
- Porri, G., Allegri, A., and Boni, I., energy utilisation during marching, III, 404.
- See also Margaria, R.
- Porta, C. F., morphology and significance of constriction and dilation of the oesophagus, III, 146.
- Porter, C. C., and Hellerman, L., α -hydroxy-aminoisobutyronitrile, an intermediate in the synthesis of porphyrin and porphyrindine, II, 205.
- Porter, C. W. See Salisbury, W. W.
- Porter, E. F., and Wyman, J., *jun*., electrical properties of stearate films deposited on metal, I, 74.
- Porter, J. See Liam, R.
- Porter, J. A. See Barbour, H. G.
- Porter, M. W., and Spiller, R. C., crystalline chemical analysis; the Barker index at Oxford, I, 627.
- Portes, L., Dalsace, J., and Wallich, R., inhibition of lactation in women with testosterone salts, III, 755.
- Lantz, N., and Krajevitch, A., effect of dihydrofolliculin on development of *B. coli in vitro*, III, 1011.
- See also Aschheim, S.
- Portier, J., and Drilhon, A., internal environment of *Eriocheir sinensis* and its adaptation to changes in salinity, III, 651.
- Portmann, A., ontogeny of mammals as an evolution problem. I. and II., III, 224.
- Portnov, M. A., and Afanasiev, S. K., rapid separate determination of potassium and sodium. II. Determination of sodium, I, 39.
- See also Afanasiev, S. K., Donskaja, D. B., and Vassiliev, B. B.
- Porto, A., *in vivo* reactions of vas deferens and seminal vesicles of castrate rat treated with sex hormones, III, 984.
- See also Martins, T., and Valle, J. R.
- Porto, J., and Marenzi, A. D., histological distribution of potassium in muscle, III, 567.
- See also Fustinoni, O.
- Porush, I. See Dunn, M. S.
- Posatti, F., and Beiglböck, W., serum-potassium and -sodium in pre-eclamptic conditions, III, 651.
- Posener, K., Walker, E., and Weddell, G., radiographic studies of metacarpal and metatarsal bones in children, III, 1021.
- Posey, L. C. See Carmichael, E. B.
- Posner, J. L., Myers, J. T., and Fodor, A. R., modified apparatus for obtaining gastric contents, III, 146.
- Posnjak, E., system calcium sulphate-water, I, 200.
- See also Merwin, H. E.
- Post, H. W., and Hofrichter, C. H., *jun*., silico-organic compounds. I. Preparation of silicon analogues of aliphatic ortho-esters, II, 535.
- Posternak, T., constitution and synthesis of phenicin, the pigment of *Penicillium phanicum*, II, 169. Pigments of *Penicillium rubrum* and of *P. citreoroseum*, III, 872.
- Posthumus, R. G., megalocornea in its relationship with other abnormalities in members of the same family, III, 835.
- Postma, N. See Jordan, H. J.
- Postma, W. P., effect of nitrate reduction on respiration of roots, III, 534.
- Postman, W. M. See Milas, N. A.
- Postovski, I. J. See Chmielewski, V. I.
- Potapenko, G. See Keutner, E.
- Potapov, I. V. See Holtschmidt, V. A.
- Potgieter, M. See Sontag, L. W.
- Poth, D. O., tumour-like keratoses, III, 1064.
- Poth, E. J., generator for production of pure carbon dioxide, I, 582. Ejector-type evacuator for wet assay systems, I, 583.
- Potop, I. See Slatineanu, A.
- Pottenger, F. M., *jun*., and Simonsen, D. G., male sex-stimulating, female sex-repressive fractions of adrenals of cows, steers, and bulls, III, 580.
- Potter, E. L., and Adair, F. L., factors associated with foetal and neonatal deaths, III, 913.
- Potter, H. See Kohler, E. P.
- Potter, J. S. See MacDowell, E. C., and Victor, J.
- Potter, V. R., oxidation of codehydrogenase. I., III, 719.
- Elvehjem, C. A., and Hart, E. B., anaemia in dogs, III, 6.
- and Lockhart, E. E., importance of cytochrome B in hydrogen transport, III, 869.
- Potts, W. M., and Carpenter, L. L., condensation of propene and isobutene with benzene in presence of anhydrous ferric chloride, II, 205.
- and Dodson, R. J., ferric chloride as a condensing agent, II, 497.
- Potvin, R. See Steacie, E. W. R.
- Pouchard, P. See Rivière, M.
- Poulidakos, P. See Tropp, C.
- Poulton, E. P., dry and wet weather, III, 620. Treatment of local tissue anoxia, III, 1033.
- See also Campbell, J. A.
- Poumeau-Deille, G. See Peyron, A.
- Pounder, E. R. See Foster, J. S.
- Poupa, O. See Karasek, F.

- Pourbaix, N. See Jeener, R.
 Pourbaix, Y. See Maisin, J.
 Poursines, Y. See Cornil, L.
 Poutiers, J. See Placidi, L.
 Povell, W. P., peripheral endings of the cochlear nerve, III, 255. Histopathology of the peripheral auditory mechanism in drug-injected animals, III, 255.
 Povitzky, O. R., comparison of antitoxic response and persistence of antitoxin in the blood of guinea-pigs injected with different preparations of diphtheria toxoid, III, 629.
 Povorinski, T. A. See Majorov, F. P.
 Powell, C. F., and Fertel, G. E. F., energy of high-velocity neutrons by the photographic method, I, 545.
 See also Heitler, W.
 Powell, G. See Birnbaum, L. S.
 Powell, Herbert M., *cis-trans*-isomerism in octahedral groups, I, 485.
 and Ewens, R. F. G., crystal structure of iron enneacarbonyl, I, 385.
 and Huse, G., structure of aromatic polynitro-compound-hydrocarbon complexes, I, 458.
 and Stanger, G. B., co-ordination by methyl isonitrile; structure of β -tetramethyl ferrocyanide, II, 410.
 Powell, Horace M., and Chen, K. K., action of sulphapyridine, III, 1081.
 and Jamieson, W. A., adsorption of heterophile antibody by pneumococci of different types, III, 331. Combined immuno- and chemo-therapy of pneumococcus rat infections, III, 1081.
 See also Osgood, E. E., and Stuart, E. H.
 Powell, L. See Feldman, H. B.
 Powell, N. B. See Hamblen, E. C.
 Powell, R. W., thermal and electrical conductivity of iron at high temperatures, I, 311. Thermal and electrical conductivities of magnesium alloys, I, 412.
 and Schofield, F. H., carbon and graphite; thermal and electrical conductivities to high temperatures, I, 187.
 Powell, T. M., and Giaque, W. F., propylene; heat capacity, vapour pressure, heats of fusion, and vaporisation; third law of thermodynamics and orientation equilibrium in the solid, I, 556.
 See also Giaque, W. F.
 Powell, W. H., ocular manifestations of alcohol, III, 472.
 Power, M. H. See Adams, M., Butt, H. R., Cutler, H. H., Goudsmit, A., jun., and Wakefield, E. G.
 Power, R. M. H. See Goodall, J. R.
 Powers, G. F., and LeCompte, P. M., congenital idiopathic hypertrophy of the heart, III, 19.
 Powers, M. J., bacteriophage specificity for coliform and related bacteria, III, 632.
 Powers, P. N., magnetic scattering of neutrons, I, 53.
 Powers, W. L., will iodine come to be considered an essential plant nutrient? III, 731.
 Poyle, W. R. See Collins, G. B.
 Pozerski, E., and Guelin, A., gelatinase of *B. aerofaciens*, III, 428. Comparative gelatinolytic effect of various types and strains of *B. perfringens*, III, 630. Gelatinase of *B. perfringens* A, III, 722. Diffusion of gelatinase of *B. perfringens* A during growth in various liquid media, III, 944.
 Poznanskaja, N. B., cutaneous sensitivity to visible and infra-red light, III, 465.
 Praagh, G. van, "acidity" of quartz, I, 499.
 Prael, W., extension of the method of determination of mol. wts. by depression of the f.p., I, 539.
 Prakash, B. See Bhatnagar, S. S.
 Prangen, A. de H. See Koch, F. L. P.
 Prankl, F. See Jentschke, W.
 Prasad, B. See Chakravarti, A. S., and Srinivasan, M. K.
 Prasad, K. See Singh, B. N.
 Prasad, M., and Desai, D. M., preparation and properties of transparent inorganic gels, I, 259. Effect of addition of non-electrolytes and of temperature on times of setting of transparent inorganic gels, I, 418.
 and Kapadia, M. R., determination of the space group of crystalline *p*-azotoluene, I, 245.
 Shanker, J., and Baljekar, P. N., space groups of *p*-nitrophenol (metastable), phenacetin, and tribenzylamine, I, 600.
 and Talpade, C. R., photoreduction of ferric compounds, I, 272.
 Prasad, S. See Singh, B. N.
 Prat, H., possibilities of under-water respiration, III, 824.
 Prat, S., and Ketovsky, R., curves of colorimetric titration of sea-water, I, 391. Colorimetric titration curves of nutrient solutions, III, 221.
 Pratesi, P., reaction of phosphoric acid with trioxymethylene, II, 303. Monoacetoxy-methyl phosphate, II, 360.
 Prathihavanija, B. See Muntch, O.
 Pratt, C. L. G. See Macintosh, R. R.
 Pratt, E. F., and Williams, Roger J., effects of pantothenic acid on respiratory activity [of yeast], III, 942.
 See also Weinstein, H. H., jun., and Williams, Roger J.
 Pratt, F. H., and Reid, M. A., synchronism of anuran lymph hearts and integration of spinal centres, III, 557.
 Pratt, H. N., mould spore content of the air in Boston; [atopic sensitivity], III, 512.
 Pratt, J. H. See Brugsch, H.
 Pratt, J. P. See Stewart, H. L., and Stover, R. F.
 Pratt, P. E. See Coleman, George H.
 Pratt, R., influence of 3-indolylacetic acid on respiration and growth of intact seedlings, III, 108. Influence of deuterium oxide on growth of *Chlorella vulgaris*, III, 1109. Influence of auxins on growth of *Chlorella vulgaris*, III, 1110.
 and Trelease, S. F., influence of deuterium oxide on photosynthesis in flashing and in continuous light, III, 1109.
 Pratt, T. D. See Cope, O.
 Prausnitz, P. H., Jena apparatus glasses and new apparatus prepared from them for distillation, stirring, p_H determination, and filtration, I, 223. Apparatus with Jena glass filter discs for extraction, filtration, and gas-washing, I, 282. Capacity of fritted filters to withstand chemical attack in analytical work with alkaline liquids, I, 493.
 Prebble, E. E., treatment of acute gonorrhoea with M. B. 693, III, 178.
 Prebluda, H. J., and McCollum, E. V., reagent for aneurin, III, 401.
 Prebus, A., and Hillier, J., magnetic electron microscope of high resolving power, I, 433.
 Preiswerk, E. See Ruggli, P.
 Prelog, V., and Bozicëvič, K., new synthesis of norlupinane (1-azadicyclo-[0-4-4]-decane), II, 340.
 Prelog, V., and Cerkovnik, E., dicyclic sulphonium salts with sulphur as branching atom. I, II, 225.
 and Heimbach, (Miss) S., pyrrolizidine (1-azadicyclo-[0-3-3]-octane), II, 340.
 Heimbach, (Miss) S., and Cerkovnik, E., 1-azadicyclo[1:2:3]-octane, II, 279.
 Heimbach, (Miss) S., and Seiwerth, R., 1-azadicyclo-[1:3:3]-nonane, II, 446.
 and Kohlbach, D., dicyclic sulphonium salts with sulphur as branching atom. II. Sulphur analogue of quinuclidine, II, 279.
 and Seiwerth, R., constitution of the so-called "norlupinane B," II, 487.
 Seiwerth, R., Hahn, I., and Cerkovnik, E., synthesis in the series of *Cinchona* alkaloids, II, 457.
 Prentice, J. H. See Bates, L. F.
 Preobraschenki, N. A. See Poljakova, A. M.
 Preobraschenki, V. A. See Poljakova, A. M.
 Prescott, B. D. See Schube, P. C.
 Prescott, C. H., jun., and Morrison, J., oxide-coated filament; relation between thermionic emission and the content of free alkaline-earth metal, I, 51. True temperature scale of an oxide-coated filament, I, 159. Apparatus for micro-analysis of gas, I, 341.
 Press, M. L., schizophrenia and recoveries after insulin treatment, III, 34.
 Press, R. See Sloane, R. H.
 Pressman, D., and Lucas, H. J., hydration of unsaturated compounds. VII. Rate of hydration of crotonic acid; rate of dehydration of β -hydroxybutyric acid; equilibrium between these acids in dilute aqueous solution, I, 570.
 See also Winstein, S., and Young, W. G.
 Pressman, J., action of the larynx, III, 38.
 Prestera, O. A., simultaneous registration of the electro- and phono-cardiogram in one tracing, III, 820.
 Preston, G. D., diffraction of X-rays by an age-hardening alloy of aluminium and copper; structure of an intermediate phase, I, 18. Temperature effect in Laue photographs, I, 184. Diffraction of X-rays by age-hardening aluminium-copper alloys, I, 251. Diffraction of X-rays by crystals at elevated temperatures, I, 553. Molecular chain structure of cellulose and its botanical significance, III, 740. Wall structure and growth. I. Spring vessels in ring-porous dicotyledons, III, 1016.
 Prestrud, M. C. See Giordano, A. S.
 Preto, V., distribution of mitotic activity in rat embryos, III, 112.
 Prettre, M., existence of two slow homogeneous mechanisms in the oxidation of mixtures of hydrogen and carbon monoxide, I, 30. Kinetic investigation of the phenomena of combustion of mixtures of hydrogen, carbon monoxide, and oxygen, I, 569.
 See also Dumanais, P.
 Preuss, H., concurrent testing with various reactions for diagnosis of syphilis in cerebrospinal fluid, III, 573.
 Prévost, C., number of Raman frequencies of the ethylenic linking, I, 179. Conjugated hexadienes, II, 399.

- Prévot, A. R., increase in toxicity of a strain of *Plectridium tetani* after culturing in acidified brain broth at a moderate temperature, III, 526. Tetanus toxin, III, 527.
- and Boorsma, H. J., stimulating effect of aqueous brain extracts on tetanus toxigenesis, III, 971. Stimulating action of lactoflavin on the production of tetanus toxins, III, 1103.
- and Kirchheiner, E., quantitative study of utilisation of carbohydrates by the tetanus bacillus, III, 206. Determination of adsorption of tetanus toxin by infusorial earth and filter candles by means of flocculation, III, 431. Stimulating action of liver extracts and nicotinic acid on tetanus toxigenesis, III, 877. Antigen common to *Spherophorus funduliformis* and *S. necrophorus*, III, 1013.
- and Pochon, J., anaerobic cellulolytic organism from sugar refinery scum; *Plectridium spumorum*, n. sp., III, 874.
- and Veillon, R., cultural and biochemical characteristics of a pseudo-tetanus bacillus, *Plectridium pseudotetanicum* (Lanz and Tavel), Prévot 1938, III, 431.
- Prevot, P. See Bouillenne-Walrand, M.
- Pribram, B. O. C., ether treatment of impacted gallstones, III, 759.
- Price, M., bactericidal action of natural honey, III, 530. Antagonistic action of staphylococci towards capsulated bacteria, III, 795.
- Price, A. E., and Myers, G. B., treatment of pneumococcal pneumonia with sulphanilamide, III, 775. See also Shecket, H. A.
- Price, C. C., dehydration of *trans*-2-methylcyclohexanol, II, 410.
- and Arntzen, C. E., mechanism of aromatic bromination, II, 55.
- Arntzen, C. E., and Weaver, C., reaction of bromine with various samples of phenanthrene, II, 55.
- and Kroll, H., kinetics of the periodate oxidation of α -glycols, I, 32.
- and Lewis, F. M., 1-hydrindone, II, 509.
- Lewis, F. M., and Meister, M., reaction of the Grignard reagent with homophthalic anhydride, II, 548.
- and Meister, M., *cis-trans*-isomerisation with boron fluoride, II, 404.
- and Thorpe, R. S., chemically catalysed *cis-trans*-isomerisation, II, 48.
- Price, C. H. G., three-phase modified Bendien reaction [for malignant disease], III, 492.
- Price, D. See Moore, C. R.
- Price, J. A., and Raper, A. B., spontaneous hypoglycemia, III, 12.
- Price, J. B., embryology of the cormorant (*Phalacrocorax penicillatus*) during the period of somite formation; comparison with the chick (*Gallus domesticus*) and the quail (*Lophortyx californica*), III, 443.
- Price, J. P., acute nicotine poisoning with fatal outcome in a child, III, 1090.
- Price, J. R., yellow colouring matter of *Dahlia variabilis*, II, 385.
- and Robinson, (Sir) R., dunnione. I, II, 557.
- Robinson, (Sir) R., and Scott-Moncrieff, R., yellow pigment of *Papaver nudicaule*. I, II, 519.
- See also Lawrence, W. J. C.
- Price, J. W. See Robinson, H. W.
- Price, N. L., gout following salyrgan diuresis, III, 311.
- Price, P. B., surgical bacteriology and surgical technique, III, 337. Ethyl alcohol as a germicide, III, 612.
- Price, R. W., and McDermott, W. C., glass helices for packing laboratory fractionating columns, I, 433.
- Price, S. A. See Smith, Margaret L.
- Price, W. C., and Simpson, (Miss) D. M., absorption spectra of carbon dioxide and carbon oxysulphide in the vacuum ultra-violet, I, 298.
- Pritchard, W. W. See Smith, L. I.
- Prichotko, A., absorption of solid mixtures of oxygen with nitrogen and with argon in the region 2800—2400 Å., I, 596.
- Prickett, C. O., Salmon, W. D., and Schrader, G. A., histopathology of peripheral nerves in vitamin-B₁ deficiency in the rat, III, 766.
- and Stevens, C., polarised light method for study of myelin degeneration compared with Marchi and Sudan III methods, III, 664.
- Prickett, P. S., and Miller, N. J., effect of pectin on bacterial growth, III, 880. See also Miller, N. J.
- Prickman, L. E., Bennett, R. L., and Krusen, F. H., treatment of brucellosis by physically induced hyperpyrexia, III, 418.
- Prideaux, E. B. R. See Webb, K. R.
- Prider, R. T., minerals from leucite-rich rocks of the West Kimberley area, Western Australia, I, 585.
- Pribsch, J. A., study by counters of the secondary radiation of cosmic ultraradiation at an altitude of 2300 metres, I, 506.
- Priest, W. J. See Ogg, R. A., jun.
- Priestley, J. G. See Courtice, F. C.
- Priestley, J. H., and Scott, L. I., formation of a new [plant]-cell wall at cell division, III, 532.
- Prieto, R. O. See Lewis, J. T.
- Prigge, R., problems of immunobiology, III, 634.
- Prileshaeva, N. A., photochemical decomposition of benzene vapour. II, I, 573, 620.
- and Noether, H., absorption spectra and chemical processes in gas discharges, I, 57.
- Prillinger, F. See Kerschbaum, E., and Wessely, F.
- Primak, F. J., tissue changes in circulatory insufficiency, III, 459.
- and Alexeenko, A. S., importance of early diagnosis of heliotoxicosis, III, 514.
- Primakoff, H., and Holstein, T., many-body interactions in atomic and nuclear systems, I, 454.
- Prince, H. E., and Secrest, P. G., jun., use of whole bee extract in sensitisation to bees, wasps, and ants, III, 936.
- Prince, L. H. See Owen, S. E.
- Pringle, J. W. S., motor mechanism of insect leg, III, 1035. Proprioception in insects. III, III, 1044.
- Pringsheim, P., fluorescence of organic compounds in solution, I, 123.
- Prins, J. A., examination of solutions by diffraction of X-rays, I, 103.
- Prinzmetal, M., Friedman, B., and Abramson, D. I., kidney in arterial hypertension, III, 658.
- See also Friedman, B., and Pickering, G. W.
- Pristoupil, I., Schluckenau nickel-copper ore, I, 435.
- Pritchard, R. R., and Simonsen, J. L., sulphonation of mesobenzanthrone and its derivatives, II, 74.
- Pritchard, W. H. See Fetterman, J. L.
- Pritchard, W. W. See Webb, T. J.
- Probst, E., volume determinations of single red cells, III, 5.
- Probst, J. G., Wheeler, P. A., and Gray, S. H., differentiation of perforated gastric ulcer from acute pancreatitis by blood-diastase determination, III, 387. See also Weichselbaum, T. E.
- Proca, A., symbolical equation combining the equations of the mesotron (heavy electron), those of Kemmer and of Klein and Gordon, and L. de Broglie's equations of the photon, I, 118.
- and Goudsmit, S., mass of the mesotron and of other elementary particles, I, 297. Mass of elementary particles, I, 400.
- Proca, G., extraction of lysogenic factors with mercuric chloride, III, 209.
- Procopiu, S., determination of the thinnest layer of electrolytically-deposited iron at which magnetic discontinuities disappear, III, 909.
- Prodinger, W. See Mayr, C.
- Proescher, F., and Moody, A. M., detection of blood by means of chemiluminescence, III, 891.
- See also Galgiani, J. V.
- Proetz, A. W., nasal physiology and its relation to the surgery of the accessory nasal sinuses, III, 124. Applied physiology of the nose and accessory sinuses [distribution of glands], III, 460.
- Prohaska, A., familial occurrence of tetany, III, 909.
- Prohaska, J. van. See Brunschwig, A.
- Prokofeeva, A. See Kabanov, B.
- Prokopetz, E. I., high-temperature hydrogenation of aromatic hydrocarbons. VI. Isomerisation of anthracene and phenanthrene perhydrides under conditions of high-temperature hydrogenation, and in presence of anhydrous aluminium chloride, II, 205.
- and Filaretov, A. N., high-temperature hydrogenation of aromatic hydrocarbons. IX. Isomerisation of cyclohexane and methylcyclopentane, II, 252.
- Filaretov, A. N., and Boguslavskaja, S. M., high-temperature hydrogenation of aromatic hydrocarbons. VII. Product of high-temperature hydrogenation of benzene, II, 205.
- Filaretov, A. N., and Pitschko, V. A., high-temperature hydrogenation of aromatic hydrocarbons. VIII. Condensation of cyclohexane in the process of hydrogenation of benzene, II, 252.
- Propper-Graschtschenkov, N. I., nature of pain, III, 569.
- Proskuriakov, N., activity of glycerophosphatase from mycelium of *Aspergillus oryzae* at different time intervals of growth, III, 1010.
- Proskurnin, M. See Gorodetskaja, A., and Xenofontov, A.
- Proskurnina, K. See Erofeev, B. V.
- Proskurnina, N., and Orekhov, A., alkaloids of *Salsola richieri*. IV. Salsolidine, II, 190.
- Protas, I. R., stability of silver iodide sols in presence of gelatin, I, 521.
- Protodiakonov, O. P., and Kresling, E. K., relations between acid-forming power and morphological characteristics of *A. niger* strains, III, 100.

- Prouty, C. C., growth responses of *Str. lactis* in mastitis milk, III, 1102.
- Provenziale, L. See Stolf, G.
- Prozorovskiy, N. A. See Adadurov, I. E.
- Prudhomme, R. O., means of recognising *in vitro* if Stefansky's bacillus is dead or alive, III, 103.
- Prujinina-Granovskaja, V., galvanomagnetic phenomena in mica, I, 245.
- Prutscher, L., histological mechanism of regeneration of striated muscle in *Anura*, III, 889.
- Pryce, M. H. L., electromagnetic energy of a point charge, I, 117.
- Pryde, E. H. See Low, G. W., jun.
- Pryor, H. B., and Smith, R. T., physical strength of adolescent girls, III, 955.
- Prytherch, H. F., life-cycle of a sporozoan parasite of the oyster, III, 327.
- Przewoski, R. von, effect of vitamin preparation "tetravit" on vitamin-C excretion and composition of the blood, III, 289.
- Przyjemski, E. See Czochralski, J.
- Przywiecki, S. J. von, variations in the combining power of serum-globulins of normal and immunised men and animals with polysaccharides, III, 209. Symplexes of proteins with other tissue components, III, 623. Protein molecule, III, 785.
- Gichocka, J., Hofer, E., and Ratałowska, H., affinity of amino-acids and polypeptides for acids, bases, and zwitter ions, I, 80.
- Kolaczowska, M., and Giedroyć, W., preparation and properties of uncharged glycine, II, 204.
- and Sym, E. A., action of esterases of pancreas and liver on polyhydric alcohols, carbohydrates, and their esters, III, 721.
- Pscheshetzki, S. J., polarisation of ions in non-uniform field and calculation of the dissociation energy of ionic molecules, I, 60.
- Pláček, B., Boyle-Mariotte law, I, 190. Upper limit of the absolute temperature, I, 557.
- Plaszek, L. See Elmer, A. W.
- Ptschelin, V. A., effect of temperature on aberrations of glass electrode in alkaline solution, I, 567.
- and Korotkin, I. I., structure and physico-chemical properties of surface layers of high-molecular compounds. I. Molecular structure of the surface layers of gelatin gels, I, 256.
- Puccinelli, V., influence of histidine on erythropoiesis, III, 115.
- Puche, F., dissociation of caesium and lithium platinichlorides, I, 145. Thermal dissociation of caesium palladichloride, I, 263.
- Pucher, G. W., Wakeman, A. J., and Vickery, H. B., organic acids of rhubarb (*Rheum hybridum*). III. Behaviour of organic acids during culture of excised leaves, III, 107.
- See also Vickery, H. B.
- Puckett, W. O., effects of intraperitoneal injections of pituitary substances on rate of tail regeneration in frog tadpoles, III, 577.
- Puddington, I. E. See Steacie, E. W. R.
- Puddu, V., and Camarella, C., electrocardiographic study of a case of complete ectopia cordis, III, 235.
- Pudenz, R. H., McIntosh, J. F., and McEachern, D., rôle of potassium in familial periodic paralysis, III, 243.
- Puchler, A., selective propagation of *Streptococcus agalactiae* and *Brucella*, III, 527.
- Püllen, C., pervitin, III, 864.
- Pütz, E., parenteral iron therapy, III, 6.
- Pugh, A. See Garner, W. E.
- Pugh, A. E., and Tandy, A. W., new stomach tube for oral administration in rats and mice, III, 62.
- Puhlmann, H. See Lendle, L.
- Pulkki, E., passivity of chromium, I, 567.
- Pullar, W. J., apparatus for determination of hydrogen ion, I, 281.
- Pulley, G. N., and Loesecke, H. W. von, preparation of rhamnose from naringin, II, 98.
- Pullinger, B. D. See Ebert, R. H.
- Pullinger, E. J., induced tissue resistance to *Brucella abortus* infection, III, 102.
- Puls, H. O. See Van Atta, L. C.
- Pulver, R., and Verzár, F., phosphorylation of riboflavin by intestinal mucous membrane, III, 926.
- Pummerer, R., Lüttringhaus, A., Fick, A., Pfaff, A., Riegelbauer, G., and Rosenhauer, E., polymerisation processes; condensation of 1:4-naphthaquinone to triphthalylbenzene by pyridine, II, 78.
- Pfaff, A., Riegelbauer, G., and Rosenhauer, E., polymerisation processes. III. Condensation of 1:4-naphthaquinone to triphthalylbenzene by pyridine, II, 483.
- Pumper, E. See Krasnooschkin, P.
- Pumper, E. J. See Dadajan, A. T.
- Pumphrey, R. J., double innervation of muscles in clam (*Mya arenaria*), III, 1034.
- and Young, J. Z., rates of conduction of nerve fibres of various diameters in cephalopods, III, 1035.
- Pumpian-Mindlin, E. See Jewett, S. P.
- Puntenney, I., effects of chemical stimuli on retinal vessels, III, 674.
- Punzel, W. See Jaretzky, R.
- Puorsines, Y., myelin and cellular staining of paraffin sections from the same block, III, 809.
- Puppel, I. D., and Curtis, G. M., iodine balance in nodular goitre, III, 138. Iodine balance in exophthalmic goitre, III, 256.
- See also Curtis, G. M.
- Puranen, U. H., negative diffusion of chloride [ions], I, 365.
- Purcell, C. W. See McMann, W.
- Purcell, E. M., focussing of charged particles by a spherical condenser, I, 52.
- Purcell, F. H. See Schaefer, R. L.
- Purcell, R. H. See Barrow, R. F.
- Purdy, W. J., tumour structure and tumour problems, III, 69.
- See also Amies, C. R.
- Purjesz, B., coagulation of serum of healthy and tumour-bearing animals and men, III, 892.
- and Tószóghy, A., action of foetal heart hormone, III, 744.
- Purks, W. K., functional bundle-branch block, III, 359.
- Purrmann, R., xanthine as constituent of the pigment of the wings of Pieridae, III, 916.
- See also Wieland, H.
- Purse, J. H. See Blair, C. M.
- Purushotam, A., change of turbidity during flocculation of manganese dioxide sol by mercuric sulphate solution, I, 261.
- Purves, C. B. See Grangaard, D. H.
- Purvis, O. N. See Gregory, F. G.
- Pushin, N. A., and Dimitrijević, G. M., binary system phenylhydrazine-p-chlorophenol, I, 419.
- and Hrustanović, K. S., binary systems containing arsenic trichloride or 5-chloro-5:10-dihydrophenarsazine, I, 145.
- Pussard, R., and Nepveu, P., action of carbon dioxide on *Rhytidoderes plicatus*, Ol., III, 899.
- Pust, G. See Thiele, W.
- Putilova, I., sorption of water by gelatin, I, 414.
- Putnam, T. J., preparing lantern slides of histological specimens in two colours, III, 1020.
- and Alexander, L., disseminated encephalomyelitis, III, 831.
- and Storch, T. J. C. von, encephalographic findings in cases of athetosis and related disorders, III, 248.
- Putnina, C. See Zarins, E.
- Putnoky, J., and Sümegi, S., relation between lead poisoning, changes in the blood vessels, and porphyria, III, 413.
- Putschkov, P. V., hydrogenation of benzene under pressure, II, 252.
- and Nikolaeva, A. F., hydrogenation of cyclohexane under pressure, II, 252. Hydrogenation of methylcyclohexane under pressure, II, 252. Hydrogenation of toluene under pressure, II, 252. Hydrogenation of hexahydromesitylene under pressure, II, 252. Hydrogenation of ethylbenzene under pressure, II, 361.
- See also Nikolaeva, A. F.
- Putseiko, E. K., spectral characteristics of selenium photoelements, I, 404.
- Putte-van Hove, van de. See Daels, F.
- Putzeys, P., and Walle, P. V., effect of calcium ions on electrophoresis of haemocyanin from *Helix pomatia*, III, 514.
- Pybus, F. C., and Miller, E. W., bone tumours and castrone, III, 145. Sex-difference in the incidence of bone tumours in mice, III, 158. Multiple neoplasms in a sarcoma strain of mice, III, 158.
- Pyke, M. See Bourne, M. C.
- Pyle, J. J., Brickman, L., and Hibbert, H., lignin and related compounds. XLIV. Ethanolysis of maple wood; separation and identification of the water-soluble aldehyde constituents, II, 516.
- See also Brickman, L.
- Pyrkosh, G., light and transpiration-resistance. I. Transpiration-resistance in monochromatic light. II. Influence of light on colloidal systems, III, 195, 213.
- Q.
- Quackenbush, F. W., Platz, B. R., and Steenbock, H., rat aedrovia and essential fatty acids, III, 701.
- Steenbock, H., and Peterson, W. H., effect of acids on carotenoids, III, 343.
- See also Kuhn, R.
- Quader, M. A. See Basu, K. P.
- Quadrat, O., and Včelák, V., new method of attack in analysis of ferrous phosphide, I, 157.

- Quagliariello, G., and Cedrangolo, F., solubility of fatty acids and glycerides in bile and bile salts, III, 149.
- Quancier, H. M., pathological-botanical side of the virus question, III, 1105.
- Quarrell, A. G. See Jackson, R.
- Quartaroli, A., promoters in catalytic reactions of ferric oxide hydrates, I, 571.
- and Rattu, A., solubility of copper components in cuprocalcic muds, I, 628. Oxidation of simple sugars, II, 493.
- Quastel, J. H., respiration in central nervous system, III, 573.
- and Webley, D. M., vitamin-B₁ and acetate oxidation by bacteria, III, 1099.
- See also Gordon, J. J., and Mann, P. J. G.
- Quayle, O. R., Owen, (Miss) K., and Estes, R. R., organic parachors. I. Parachors of a series of isomeric esters, I, 11.
- See also Owen, (Miss) K.
- Quadrat-i-Khuda, M., and Ghosh, S. K., substituted ring compounds. I. Synthesis of 2:2:4-trimethylcyclopentanone, II, 551.
- Mallick, A. A., and Mukherji, A., strainless monocyclic rings. III. Synthesis of 2-methylcyclohexane-1-carboxylic-1-acetic acid and separation of its isomerides, II, 66.
- Queen, F. B., diagnosis of trichinosis by the digestion method, III, 628.
- Quelet, R., and Allard, J., synthesis of α -dichloro- α -p-anisylethane; conversion into β - and α -chloro- α -p-anisylethylene, II, 59.
- and Ducasse, J., chloroalkylation of *p*-propylanisole; synthesis of derivatives, II, 315.
- Queney, P., counter for large [gaseous] ions giving the mobility spectrum directly, I, 390.
- Quense, J. A., and Dehn, W. M., vial holder, I, 583.
- Querido, A., Albeaux-Fernet, M., and Lvov, A., nicotinamide content of blood, III, 921.
- Lvov, A., and Lataste, C., determination of nicotinamide in blood, III, 921.
- and Overbeek, G. A., origin of reticulopenia after hypophysectomy, III, 547.
- See also Ballif, L., Lvov, A., and Overbeek, G. A.
- Quernheim, T., effect of different kinds of light on growth of germinating plants, III, 1109.
- Query, R. Z., pneumococcus type VII meningitis, treated with sulphanilamide and specific serum, with recovery, III, 177.
- Quevauxviller, A. See Régnier, J.
- Quevroun, L., integrator of radiant energy, I, 104.
- Quick, A. J., normal antithrombin of the blood and its relation to heparin, III, 231. Calcium factor in quantitative determination of prothrombin, III, 892.
- and Grossman, A. M., concentration of prothrombin in blood of babies 3—7 days old, III, 1027. Prothrombin concentration in newborn, III, 1027.
- Quick, L. A. See Breckenridge, G.
- Quigley, J. P., Einsel, I. H., and Meschan, I., effects produced in the normal stomach by the ingestion of aluminium hydroxide gel, III, 483.
- Quilico, A., and Fusco, R., isooxazole series. I, II, 90.
- and Justoni, R., isooxazole series. II. Halogen derivatives, II, 90.
- and Panizzi, L., isooxazole series. VI. Amino-derivatives of aliphatic type. VII. Primary alcohols and aldehydes, II, 90, 523.
- and Speroni, G., syntheses of isooxazole derivatives by means of fulminic acid. I, II, 523.
- Quilliam, J. P. See Lythgoe, R. J.
- Quinby, W. C., urology, III, 915.
- Quinet, (Mlle.) M. L., electrolysis of magnesium chloride hexa-hydrate and -alcoholate in methyl and ethyl alcohol, I, 35.
- See also Olmer, L. J.
- Quinlan, F. See Gordon, N. T.
- Quinn, R. B., sparking potentials at low pressures, I, 228.
- Quinquaud, A. See Clerc, A., and Hazard, R.
- Quint, F. See Diltthey, W.
- Quintela, D. M., iodohydargyrometry, I, 278. Cryoscopy, I, 490.
- Quintin, (Mlle.) M., activities of copper and cadmium ions in solutions of their benzenesulphonates, I, 80.
- Quintino, M., synthesis of 2-(*p*-aminobenzenesulphonamido)pyridine (M. & B. 693), III, 998.
- Quiquerez, J. See Mondain-Monval, P.
- Quirico, P. See Stefano, B.
- Quirke, T. T., gold deposits of northern Oriente, Cuba, I, 345.
- Quitmann, E., and Cauer, H., chemical analysis of fog nuclei in the air, I, 275.
- Quivy, D. See Gayet, R.
- Quodling, F. M., and Cohen, S. B., X-ray examination of chillagite, I, 288.

R.

- Rabe, P., and Kindler, K., cinchona alkaloids. XXX. Syntheses in the series of the cinchona alkaloids, II, 187.
- Rabi, I. I., Millman, S., Kusch, P., and Zacharias, J. R., molecular beam resonance method for measuring nuclear magnetic moments; magnetic moments of ^7Li , ^6Li , and ^{19}F , I, 297.
- See also Kellogg, J. M. B., Kusch, P., and Millman, S.
- Rabinerson, A. I., structure formation in lyophobic sols. I and II, I, 76.
- and Filippov, M., emission of short-wave ultra-violet radiation in structure building. I. Radiation in typical coagulation, I, 24. Emission of short ultra-violet radiation during formation of structures, I, 118. Emission of ultra-violet radiation during coagulation, I, 142.
- and Vladimirskaia, M. A., mitogenetic radiation during the formation of sparingly soluble precipitates, I, 621.
- Rabinovitch, A. J. See Schischniashvili, M. E.
- Rabinovitch, F. E. See Scherlin, S. M.
- Rabinovitch, M. S., and Kononova, R. A., anasthetising action of convolvine and convolvamine, II, 349.
- Rabinowicz, M. See Giroud, A.
- Rabinowitch, E., conversion of light into chemical energy, I, 481.
- Rabinowitch, I. M., nutritional requirements of the mother during lactation, III, 282. Effects of betaine on cholesterol and bilirubin contents of blood-plasma in diabetes mellitus, III, 300. Theoretical and actual calorific requirements, III, 404. Case of diabetes mellitus with marked hypercholesterolemia and signs simulating cerebral thrombosis, III, 855.
- and Fowler, A. F., variation of weight of dry faeces in short-period experiments with a low-residue neutral-ash diet, III, 484.
- Fowler, A. F., and Bensley, E. H., diabetic coma, III, 608.
- Mountford, M., O'Donovan, D. K., and Collip, J. B., influence of a specific pituitary hormone on basal metabolism in man, III, 577.
- Rabinowitch, L., and Wynne, A. M., pancreatic lipase. III. Activation of washed enzyme by serum and other substances, III, 98.
- Rabor, D. S., anatomy of *Chanos chanos* (Forsk.). I, III, 806.
- Race, H. H., and Reynolds, S. I., electrical properties of multimolecular films, I, 468.
- Raciński, B. See Achmatowicz, O.
- Racz, C., emission of ultra-violet radiation and pyrolysis of ferric azide, I, 616.
- See also Audubert, R.
- Radaody-Ralarosy, P., vitality of *BCG* grown on potato at 37°, III, 631.
- Radczewski, O. E. See Eitel, W.
- Rademacher, B., content, requirement, and process of assimilation of copper of oat varieties as a basis for breeding varieties resistant to "moorland heath" disease, III, 731.
- Radimov, N. L., theory of cation exchange of permutites. I.—III, I, 376.
- Radischev, V. P., multicomponent mutual systems; physico-chemical properties of multicomponent mutual systems; topological structure of stable complexes of multicomponent mutual systems and classification of their diagrams, I, 265.

- Radnor, I., polyarticular arthritis treated with oestrogenic hormone, III, 584.
- Radovici, A., and Papazian, R., adiposogenital syndrome and epilepsy, III, 473. Carbon monoxide poisoning, III, 825.
- Radsma, W., and Kiang, L. E., action of digitalis glucosides on the heart of *Bufo melanostictus*, III, 85.
- Radulesco, G., photo-oxidation of diisopropyl ether, I, 379.
- Radulescu, D., atom model which explains quantum conditions and permits the derivation by means of classical physics of Bohr's radiation laws, I, 594.
- and Alexa, M., vapour pressure measurements by new dynamic and static methods; comparative study of the applicability of the reaction isochore to measurement of heat of vaporisation, I, 603.
- and Bărbulescu, F., spirans. XXIII. Derivatives of phenylindanedione, II, 552.
- Novac, L., Petreanu, I., and Popa, S., properties of nitro-groups; trinitrobenzene derivatives, II, 537.
- and Rădulescu, F., properties of liquid layers containing few molecules, I, 415.
- Rădulescu, F., parachor, desorption isotherm, and molecular radius, I, 415.
- See also Rădulescu, D.
- Rădulescu, N. See Pascanu, O.
- Raduschkevitch, L. V., and Tschugunova, O. K., influence of vapours of organic compounds on rate of coagulation of aerosols, I, 257.
- Radvan, S. See Vasiliu, G.
- Radwin, L. S. See Grayzel, H. G.
- Radzinski, B., binding energy of the ^{16}N nucleus, I, 297.
- Rae, J. J., and Eastcott, E. V., effect of urea and sodium chloride on the colorimetric determination of organic phosphate by King's method, III, 954.
- Rae, S. L. See Lowdon, A. G. R.
- Raeder, M. G., and Kyllingstad, O. S., quantitative deposition of small amounts of gold from solution by micro-electrolysis, I, 388.
- Raekallio, T., micro-determination of purine-nitrogen in urine, III, 392.
- Raether, H., development of the electron avalanche in the path of a spark, I, 347.
- Rätzl, G. See Du Mont, H. L.
- Rafajłowska, H. See Przyłeki, S. J. von.
- Raffa, (Signa) L., etherification of isoamyl alcohol, II, 199.
- Raffaelli, D., volumetric determination of calcium and magnesium in milk, III, 489.
- Raffy, A., and Mirimanoff, A., flavin of *Bremothecium ashbyi*, III, 219.
- and Ricart, R., influence of changes in salinity on oxygen consumption of Cephalopoda, III, 718.
- See also Randoiu, L.
- Raggatt, H. G., sedimentary deposits of copper, vanadium-uranium, and silver in south western United States, I, 284.
- Ragno, M., penta(acetoxymercuri)methylacetanilide, II, 131. Mercury derivatives of antipyrine, II, 131. Mercuriated and brominated compounds of acet-*p*-phenetidine, II, 396. Mercury derivatives of phenacetin, II, 563.
- See also Rossi, G.
- Ragsdale, A. C. See Washburn, L. E.
- Ragsdale, J. W. See Allen, C. D.
- Rahm, W. E., jun. See Strauss, H.
- Rahn, H., structure and function of placenta and corpus luteum in viviparous snakes, III, 984.
- See also Kleinholz, L. H.
- Rahn, O., lactic acid formation by muscles of scorbutic guinea-pigs, III, 243.
- Rahway, N. J. See Molitor, H.
- Raia, A., bronchiectasis in children, III, 1034.
- Raichle, K. See Windaus, A.
- Raiford, L. C., and Gundy, G. F., $\alpha\beta$ -unsaturated ketones obtained from acetophenone and their reaction with phenylhydrazine, II, 68.
- and Shelton, J. R., preparation and behaviour of mixed diacyl derivatives of *o*-aminophenol containing a carboaryl-oxy radical and the *p*-toluenesulphonyl group, II, 417.
- Raiford, T. E., relationship between height and weight of male and female infants between the ages of two weeks and one year, III, 345.
- See also Munday, B.
- Raigrotzki, J., effect of vasodilating substances on the cutaneous blood vessels of the white mouse, III, 238.
- Raikov, P. N., retention of alkalis by the metal hydroxides of the chromium group, I, 279.
- Raine, H. C., and Hinshelwood, C. N., functional relation between the constants of the Arrhenius equation; formation of a series of quaternary ammonium salts in benzene-nitrobenzene mixtures, I, 569.
- Raines, (Miss) B., accommodation coefficient of helium on nickel, I, 604.
- Rainey, C. C., transport of water to anode or cathode through non-aqueous liquids, I, 421.
- Rainey, J. L., and Adkins, H., reactions of hydrogen with pyrrole derivatives, II, II, 338.
- Rainey, R. C., changes in chemical composition associated with larval development in the sheep blowfly, III, 607.
- Rainsford, A. E., and Hauser, C. R., acylation of aldoximes. II. Inversion of configuration in the preparation of carbanilinoaldoximes from phenylcarbamide and *syn*-aldoximes, II, 549.
- See also Le Maistre, J. W.
- Raison, C. G. See Ing, H. R.
- Raistrick, H. See Anderson, C. G., Anslow, W. K., Ashley, J. N., Calam, C. T., Cruickshank, J. H., and Oxford, A. E.
- Rait, J. R., M'Millan, Q. C., and Hay, R., viscosity determinations of slag systems, I, 312.
- Raiziss, G. W., Clemence, L. W., Severac, M., and Moetsch, J. C., chemistry and chemotherapy of 4:4'-diaminodiphenyl sulphone, 4-amino-4'-hydroxydiphenyl sulphone, and related compounds, II, 545. Therapeutic effect of 4:4'-diaminodiphenylsulphone, corresponding sulphide, and acetyl derivatives, in streptococcal infection, III, 304. Comparative effects of sulphapyridine and sulphanilamide in type II pneumococcal infection in mice, III, 999.
- See also Kolmer, J. A.
- Rajagopal, K., basal metabolism of Indian and European men on the Nilgiri hills (S. India), III, 293.
- See also Aykroyd, W. R.
- Rajagopal, K. R. See Moore, T.
- Rajagopal, S., and Iyengar, A. V. V., chemical composition and physical properties of plant tissue fluids. II. Effect of mineral fertilisers on tissue fluids of ragi (*Eleusine coracana*, L.), III, 106.
- Rajagopalan, V. S. See Raman, (Sir) C. V.
- Rajam, J. B. R., Capron, P., and De Hemptinne, M., evaluation of the β upper energy limits [of radio-elements] with simple absorption data, I, 546.
- Rajčević, B., salinity of the waters of the Seine between Amfreville and Honfleur, I, 283.
- Rajewsky, B., biophysical basis of internal radium and of radon therapy, III, 717.
- Raju, M. S., bacterial-plant groups of cowpea, cicer, and dhaincha. I. Classification. II. Infective power of nodule bacteria of the cowpea group, III, 434.
- Rake, G., active immunity against an intestinal and a respiratory infection, III, 204.
- See also Branham, S. E.
- Rakestraw, N. W., and Emmel, V. M., solubility of nitrogen and argon in sea-water, I, 71.
- Herrick, C. R., jun., and Urry, W. D., helium-neon content of sea-water and its relation to the oxygen content, I, 627.
- Rakićen, M. L. See Oliver, W. W.
- Rakoff, A. E., biological titration of oestrogenic and gonadotropic hormones in sera of pregnant women, III, 980.
- Rakowski, L. See Szperl, L.
- Rakshit, P. C. See Ghosh, J. C.
- Rakušan, B. See Křepelka, J. H.
- Ralea, R. See Audubert, R.
- Ralli, E. P., Fein, H. D., and Lovelock, F. J., continued use of protamine-zinc-insulin in severe diabetes mellitus, III, 51.
- Friedman, G. J., and Rubin, S. H., excretion of vitamin-C by the human kidney, III, 153.
- Friedman, G. J., and Sherry, S., excretion and plasma concentration of vitamin-C in man, III, 1072.
- Ralph, C. S. See Earl, J. C.
- Ralston, A. W., and McCorkle, M. R., *pp'*-diaminodiphenylmethane as a reagent for the identification of monobasic, saturated, aliphatic acids, II, 403.
- Segebrecht, E. W., and Bauer, S. T., esters of aliphatic thio-acids of high mol. wt., II, 533.
- and Selby, W. M., action of sodium on fatty acid chlorides of higher mol. wt., II, 297.
- Van der Wal, R. J., and McCorkle, M. R., preparation and properties of high-mol. wt. aliphatic thioamides, II, 204.
- See also Hoffman, E. J.
- Ralston, C. E. See Holden, F. R.
- Ralston, M. B., and Wells, A. H., azo-carmin stain for bone marrow, III, 645.
- Ralston, N. P. See Peterson, V. E.
- Ramage, G. R., and Simonsen, J. L., constitution of β -caryophyllene, II, 273.
- Simonsen, J. L., and Stowe, W. J. I., derivatives of phloroglucinol trimethyl ether, II, 110.
- See also Jones, W. Elwyn, and Penfold, A. R.
- Ramaiah, K. S., Liesegang rings, I, 470.
- See also Raman, (Sir) C. V.
- Raman, (Sir) C. V., and Nedungadi, T. M. K., lattice oscillations in crystals, I, 403.

- Raman, (Sir) C. V., and Rajagopalan, V. S., structure and optical properties of iridescent glass, I, 407.
- and Ramaiah, K. S., wave-like character of periodic precipitates, I, 470.
- and Venkateswaran, C. S., Debye heat waves in highly viscous liquids, I, 9.
- Coherent modified scattering of light, I, 120.
- Rigidity of liquids, I, 451.
- Determination of the adiabatic piezo-optic coefficient of liquids, I, 453.
- Raman, P. S., M. & B. 693 in pneumococcal meningitis, III, 774.
- Ramanujam, S. See Pal, B. P.
- Ramart-Lucas, (Mme.) P., structure of rhodamines from their absorption spectra, I, 119.
- Structure and absorption spectra of hydroxytriphenylmethane dyes; isomeric forms of hydroxyfuchsones, II, 260.
- Structure and absorption [spectra] of hydroxy-derivatives of triphenylmethane dyes; existence of two coloured isomeric forms of phenolsulphonophthaleins and phenolphthalein, II, 321.
- Grumez, M., and Martynoff, M., structure and absorption [spectra] of diamino-derivatives of acridine dyes, II, 126.
- Ramat, A., densities of liquid organic compounds, I, 410.
- Rambacher, P. See Schöberl, A.
- Rambaud, R., action of sodium ethoxide on γ -halogenocrotonic esters, II, 47.
- Rambe, L., chronic sodium chloride intoxication as aetiological factor in malnutrition diseases of cattle, III, 493.
- Ramberg, E. G., and Morton, G. A., variation of light output with current density and classification of willomite phosphors, I, 241.
- Ramberg, L., and Bäcklund, B., determination of sulphur and halogens in organic compounds by the combustion [method] of Grote and Krekeler, II, 397.
- and Hedlund, I., racemisation of optically active α -phenylsulphonylpropionic acid, I, 618.
- Ramdohr, P., bertrandite from Klein-Spitzkopje, South West Africa, I, 392.
- Ramel, E., and Vulliemoz, C., bactericidal action of ozonides, III, 433.
- Ramiah, P. V., Sundaram, M., and Narayanayya, Y. V., effect of muscular work on protein metabolism in the ruminant, III, 619.
- Ramm, W. See Debye, P.
- Ramon, G., flocculation in mixtures of tetanus bouillon and specific serum and determination of antigenic value of the tetanus toxin and anatoxin, III, 332.
- and Richou, R., factors in toxin production in cultures of staphylococci, III, 430.
- Ramontianu, E. See Tanasescu, I.
- Ramos, A. P., and Colombo, E. O., action of testosterone propionate, III, 267.
- Ramsbottom, M. See Koonz, C. H.
- Ramsdell, L. S., composition, space-group, and unit cell of hanksite, I, 284.
- Ramsden, W., coagulation by shearing and freezing, III, 320.
- Ramsey, N. F., jun. See Kellogg, J. M. B.
- Ramsey, R. W., and Street, S. F., a excitability of local and propagated mechanical response in isolated single muscle fibres, III, 242.
- Ramsey, W. E. See Montgomery, C. G., Swann, W. F. G., and Thomas, J. E., jun.
- Ramshorn, K. See Ruhland, W.
- Rana, K. N. See Hirwe, N. W.
- Ranade, J. D., and Paranjpe, G. R., viscosity of aqueous solutions of strong electrolytes, I, 250.
- Rand, G. See Ferree, C. E.
- Randall, D. I. See Simons, J. H.
- Randall, H. M., and Firestone, F. A., recording spectrograph for the far infrared, I, 103.
- Randall, J. T., experiments in luminescence, I, 124.
- Fluorescence of compounds containing manganese, I, 301.
- and Wilkins, M. H. F., luminescence and photoconductivity of solids, I, 451.
- Randall, L. M., Krusen, F. H., and Bannick, E. G., artificial fever therapy and sulphanilamide therapy in the treatment of female gonorrhoea, III, 410.
- See also Wilson, R. B.
- Randall, L. O., Cameron, D. E., and Looney, J. M., changes in blood-lipids during insulin treatment of schizophrenia, III, 35.
- and Jelinek, E. M., insulin treatment of schizophrenia. I. Choline-esterase of the blood serum. III. Serum-lipids, III, 902, 976.
- Randall, M., and Doody, T. C., octahedral arsenious oxide, I, 382.
- and Longtin, B., Lodochnikov's method of representing polynary systems, I, 80.
- Determination of density differences by the flotation temperature method, I, 223.
- Randall, R. H., Rose, F. C., and Zener, C., intercrystalline thermal currents as a source of internal friction, I, 555.
- Randle, S. B. See Kohler, G. O.
- Randoin, L., Fontaine, M., Busnel, R. G., and Raffy, A., rat growth factors present in skin and scales of fish, III, 165.
- Giroud, A., and Ratsimamanga, R., ascorbic acid content of chlorophyll-containing tissues, III, 168.
- and Leblond, C. P., biochemical determination of vitamin-C, III, 605.
- and Milhaud, F., alimentary equilibrium; effect of the addition of salt mixture to carbohydrate diets, III, 398.
- Raffy, A., and Gourévitch, A., riboflavin (vitamin-B₂) content of young normal rats on a diet deprived of vitamin-B₂, III, 766.
- Rane, L. See Subbarow, W.
- Raney, R. B. See Nielsen, J. M.
- Ranganathan, S., variations in the iron content of food-stuffs, III, 162.
- Ranganathan, S. K., β -isopropylglutaconic acid, II, 241.
- Synthesis of physiologically active lactones. I. cyclopentyl- and cyclohexyl-succinic acids; resolution of *dl*-cyclopentylsuccinic acid, II, 321.
- See also Guha, P. C.
- Ranganathan, V., and Sastri, B. N., digestibility of proteins of Bengal gram, *Cicer arietinum*, Linn., III, 397.
- See also Rau, Y. V. S.
- Rangaswami, S., fine adjustment device for use with micro-Dumas apparatus, II, 43.
- Methyl β -resorcyate, II, 320.
- Rao, P. S., and Seshadri, T. R., pigments of cotton flowers. VI. Methylation of herbacetin, II, 276.
- and Seshadri, T. R., nuclear methylation of resacetophenone; 3-methylresacetophenone and its derivatives, II, 23.
- Rangaswami, S., and Seshadri, T. R., fixation of aromatic double bonds in the chromones, II, 221.
- 7-Hydroxy-chromone-8-aldehydes and their conversion into chromone-7:8-a-pyrones, II, 221.
- Synthetic experiments in the benzopyrone series. I. Synthesis of karanjin- α -carboxylic acid, II, 278.
- Fixation of aromatic double bonds in hydroxychromones and -coumarins; formation of azo-dyes, II, 485.
- 7-Hydroxy-3-benzoylflavone, II, 519.
- Seshadri, T. R., and Veeraraghaviah, J., constitution of naringin; position of the sugar group, II, 385.
- Ranges, H. A. See Smith, H. W., and Suistu, W. W.
- Rangier, M., and De Traverse, P. M., formation and constitution of skatole-red from urine, II, 450.
- Skatole-red of urine, III, 393.
- Urinary glycuronic acid and urochrome, III, 844.
- Rankama, K., purification of Clerici's solution and acetylene tetrabromide, I, 540.
- Rankin, C. W., applications of the spectrograph to criminal investigation, I, 485.
- Rann, W. H. See Nahmias, M. E.
- Rannikko, V. See Salmi, E. J.
- Ransford, O. N. See Manson-Bahr, P.
- Ransom, W. W. See Kistiakowsky, G. B.
- Ranson, S. W., and Clark, G., neurogenic fever reduced by nembutal, III, 411.
- and Magoun, H. W., the hypothalamus, III, 372.
- See also Clark, G., Fisher, C., and Magoun, H. W.
- Ranson, T. See Bellus, S.
- Rantz, L. A. See Keefer, C. S.
- Rao, A. B., spectrum of argon iv, I, 227.
- and Krishnamurthy, S. G., third spark spectrum of krypton, Kr iv, I, 543.
- Rao, B. S. See Carter, F. D., and Iyengar, N. V. R.
- Rao, B. S. M., and Iyengar, K. V., inequality concerning lattice sums, I, 128.
- Rao, C. V. J. See Bhagavantam, S.
- Rao, G. Gopala. See Rao, W. V. S., and Varadanam, C. I.
- Rao, K. R., spectrum of singly-ionised tellurium (Te II), I, 290.
- Rao, M. N., vitamin-C and peptic ulcer, III, 167.
- Rao, M. R. See Sibaiya, L.
- Rao, M. S. See Dastur, R. H.
- Rao, M. S. S. See Manjunath, L.
- Rao, M. V. R., myelin degeneration [of nerve] in polarised light, III, 28.
- Rao, N. K. A. See Singh, B. N.
- Rao, N. V. S., and Seshadri, T. R., use of mercuric acetate in organic preparations. I. Mercury compounds of amides and imides, II, 496.
- Rao, P. L. N. See Guha, P. C.
- Rao, P. S., Sastri, V. D. N., and Seshadri, T. R., reactivity of the double bond in coumarins and related unsaturated carbonyl compounds. VII. Action of mercuric acetate on hydroxy- and 4-methyl-coumarins, II, 221.
- and Seshadri, T. R., pigments of cotton flowers. VII. Position of the glucose residue in gossypitrin. VIII. Herbacetin and quercimeritrin, II, 245, 385.
- Methylation of hydroxy-flavanols; quercetin, gossypetin, and herbacetin, II, 441.
- Variation in composition of the pigments of Indian cotton flowers, III, 219.
- See also Rangaswami, S.

- Rao, R. S. See Shortt, H. F.
- Rao, S. N., and Wheeler, T. S., chalkones: reactivity of phenyl *p*-benzyloxystyryl ketones, II, 374.
- Rao, S. R., and Aravamuthachari, S., magnetic susceptibility of mercury and dilute alkali amalgams, I, 308.
- and Govindarajan, S. R., principal magnetic susceptibilities of tellurium crystal, I, 601.
- and Narayanaswamy, A. S., crystalline diamagnetism of thallium, I, 66.
- Diamagnetism of organic liquid mixtures, I, 249.
- Rao, S. R. A. N. See Singh, B. N.
- Rao, W. V. S., Krishnamurti, P. I., and Rao, G. Gopala, microbiological oxidation of ammonia. I. Formation of intermediate products, III, 428.
- Raoul, Y., and Meunier, P., assay of vitamin-A preparations, III, 400.
- Kinetic colorimetry in the study and determination of vitamin- and provitamin-D, III, 1074.
- See also Meunier, P.
- Raper, A. B. See Price, J. A.
- Raper, H. S. See Cavanagh, B.
- Raper, K. B., influence of culture conditions on growth and development of *Dictyostelium discoideum*, III, 1098.
- Raper, R. See Clemo, G. R.
- Rapin, A., determination of small quantities of alcohol in toxicology by sulphuric-chromic acid mixture, III, 440.
- Rapkin, L., Rapkin, S. M., and Trpinac, P., effect of protection of coenzyme on thiol groups of dehydrogenases, III, 1008.
- and Trpinac, P., role of the thiol groups of proteins in the activity of the dehydrogenases, III, 870.
- See also Cordier, D.
- Rapkin, S. M. See Rapkin, L.
- Rapoport, M., and Kenney, A. S., lead encephalopathy in breast-fed infant due to use of lead nipple shields by mother, III, 865.
- See also Grigoriev, P., and Kenney, A. S.
- Rapoport, S., and Guest, G. M., changes of organic acid-soluble phosphorus, diphosphoglycerate, adenosine triphosphate, and inorganic phosphorus in blood cells of rats during development and healing of rickets, III, 292.
- Decomposition of diphosphoglycerate in acidified food; relationship to reactions of glycolytic cycle, III, 926.
- Rapp, R., growth-retarding substances occurring in the plant and animal kingdom, III, 535.
- Rappaport, B. Z. See Hecht, R.
- Rappaport, F., use of periodate in volumetric determination of polyhydric alcohols and reducing aldoses, and the determination of periodate and iodate; use of periodate in the volumetric determination of ketoses, II, 195.
- Rappaport, H. See Dobbins, J. M.
- Rappaport, J. See Hubert, B.
- Rappoport, E. M., and Scadron, S. J., pelvirodiography and clinical pelvimetry, III, 913.
- Rapson, W. S., constituents of the leaves of *Leucadendron* species. II. Degradation experiments with leucodrin, II, 436.
- See also De Kock, P. C., and Molteno, C. J.
- Rarei, B., and Gummel, H., prolan metabolism after splenectomy, III, 47.
- Pituitary [and testis] and tumour growth, III, 159.
- Action of 3:4-benzopyrene on tumour growth, III, 598.
- See also Druckrey, H., Gummel, H., and Herken, H.
- Rarita, W., and Slawsky, Z. L., nuclear two-body variational problem, I, 117.
- Rasario, G. M., pharmacology of hydroxyphenylisopropylmethvlamine ("veritol"), III, 508.
- Rascanu, V., Busila, V., and Dorogan, D., physical changes in blood during recovery from massive hemorrhage, III, 959.
- Dorogan, D., and Kapri, M., effect of X-rays and ultra-violet rays on structure of myelinated nerve fibres, III, 128.
- and Kapri, M., motor nerve energy as a function of chronaxie, III, 245.
- Kapri, M., and Popovici, G., effect of X-rays on the motor cortex, III, 247.
- Effect of chloroform, evipan, and veronal on the activity of the motor cortex, III, 932.
- Raschba, O. J., variations in the total and non-protein arginine content of eggs during embryonic development, and under influence of certain factors, III, 79.
- Raschkovan, B. A., determination of small concentrations of electrolytes by measurement of the strength of the current in closed circuits. I and II, I, 421.
- Rasmussen, G. L. See Lassek, A. M.
- Rasmussen, H., and Thingstad, R., cardiovascular changes in essential hypertension with special reference to electrocardiogram, III, 1032.
- Rasmussen, R., Bogart, R., and Maynard, L. A., ascorbic acid content of milk of various species as influenced by ascorbic acid injection and diet, III, 403.
- Rast, W. L., and Ham, W. R., diffusion of hydrogen through iron at temperatures between 780° and 90°, I, 71.
- Rastall, R. H., brookite crystals in the Dogger of N.-E. Yorkshire, I, 109.
- Rutile in the Dogger [of N.-E. Yorkshire], I, 435.
- and Hemingway, J. E., black oolites in the Dogger of N.-E. Yorkshire, I, 542.
- Rastegar, R. See Riehou, R.
- Rastelli, G. See Rabbeno, A.
- Rastetter, A. See Weber, U. von.
- Rathery, F., Dérot, M., and De Traverse, P. M., hypoglycemia following absorption of insulin from the gut, III, 582.
- Froment, M., and De Traverse, P. M., glucose tolerance test in diabetics, III, 79.
- Rathgeber, H. D., barometer effect for cosmic radiation and the mesotron, I, 55.
- Rathje, W. See Giesecke, F.
- Ratish, H. D., Bullowa, J. G. M., Ames, J. B., and Scudi, J. V., urinary excretion products of sulphanilyl-2-aminopyridine, III, 609.
- See also Scudi, J. V.
- Ratner, B., allergy in childhood, III, 418.
- and Gruehl, H. L., anaphylactogenic properties of cereal foods and bread-stuffs; allergenic denaturation by heat, III, 1092.
- Smyth, F. S., Rowe, A. H., and Piness, G., allergy in pediatric practice, III, 92.
- See also Huber, H. L.
- Ratner, M., and Strasberg, A., case of xanthine calculosis, III, 761.
- Ratner, S. See Schoenheimer, R.
- Ratnoff, O. D., anaphylaxis in the pregnant rat, III, 935.
- Relation of acetylcholine to anaphylactic shock in rabbits, III, 1005.
- Ratschow, M. See Cobet, R.
- Ratsimamanga, R., variations in ascorbic acid content of adrenals during work, III, 1051.
- See also Giroud, A., and Randoin, L.
- Rattner, H., and Roll, H. C., herpes zoster and vitamin-B₁, III, 828.
- Rattu, A., existence of hexamethylene-tetramine salts in solution, I, 471.
- See also Quartaroli, A.
- Ratz, H. See Behaghel, O.
- Rau, Y. V. S., and Ranganathan, V., biological value of the protein mixtures of Indian diets. I. Biological value of the proteins of Madras, Bombay (Parsi), and Punjab diets, III, 599.
- Rauch, K. See Fischer, F. G.
- Rauch, S., Litvak, A. M., and Steiner, Morris, congenital familial steatorrhea with fibromatosis of the pancreas and bronchiolactasia, III, 691.
- Rauch, W., ultra-violet dispersion frequencies of the alkali hydrides, I, 177.
- Rauh, W., effect of AT₁₀, Holtz (dihydro-tachysterol) on lens in tetany, III, 751.
- Raunert, M., haemostatic effect of citrin (vitamin-P), III, 10.
- Rauterberg, E., variability of protein content of plants, III, 107.
- and Knippenberg, E., determination of nitrogen in nitrate-containing plants, III, 1018.
- Raval, D., Bokil, K. V., and Nargund, K. S., condensation of succinic anhydride with phenols, II, 267.
- Ravdin, I. S., Vars, H. M., Goldschmidt, Samuel, and Klingensmith, L. E., anaesthesia and liver damage. II. Effect of anaesthesia on blood-sugar, liver-glycogen, and liver-fat, III, 186.
- See also Frazier, W. D., Goldschmidt, Samuel, and Morrison, J. L.
- Raven, C. P., "bipolar differentiation" of eggs of polychaetes and mollusca, III, 739.
- Raventós, J., influence of room temperature on action of barbiturates, III, 312.
- Action of adenine compounds on [isolated] frog's intestine, III, 713.
- See also Clark, A. J., and Donald, H. P.
- Raveux, R. See Jacquot, R.
- Ravin, A., and Waring, J. J., dystrophia myotonica, III, 826.
- Ravitsch, G. B., dependence of viscosity of long-chain fatty acids on temperature and degree of unsaturation, I, 312.
- See also Anosov, V. J.
- Ravner, J. See Tolstoi, E.
- Rawdon-Smith, A. F., Carmichael, L., and Wellman, B., electrical responses from the cochlea of the foetal guinea-pig, III, 134.
- and Hawkins, J. E., electrical activity of a denervated ear, III, 575.
- See also Craik, K. J. W.
- Rawiel, F. See Herre, W.
- Rawlinson, W. A., effect of ions of copper, zinc, and mercury on the blood pigment, III, 299.
- Reactions of copper ions with haemoglobin, oxyhaemoglobin, and methaemoglobin, III, 813.

- Rawls, W. B., Gruskin, B. J., Ressa, A. A., and Gordon, A. S., relation between skin sensitivity, liver function, leucopenic index, and toxic effects from cinchophen, III, 510.
- Weiss, S., and Collins, V. L., liver function in rheumatoid arthritis, III, 594.
- Rawson, D. S. See Clemens, W. A.
- Ray, F. E., and Rieveschl, G., jun., fluorene compounds; nitrogen derivatives, II, 15.
- Ray, G. B., Johnson, J. R., and Taylor, M. M., effect of gelatin on muscular fatigue, III, 968.
- Ray, J. N. See Bakshi, H. S., and Duegan, B. S.
- Ray, N., fluoberyllates and their analogy to sulphates. VI. Fluoberyllates of metalammino-complexes, I, 380.
- Ray, N. N., and Das, G. C., immunisation of horses for production of high-titre tetanus antitoxin, III, 209.
- Ray, O. M., and Bodine, J. H., ultra-violet irradiation of grasshopper eggs (Orthoptera), III, 347. Effect of dialysis on activity of tyrosinase, III, 1096.
- Ray, P., and Dutt, N. K., quinaldinic acid as analytical reagent. III. Determination of zinc in presence of copper, silver, and mercury, I, 157.
- and Saha, H., complex compounds of diguanide with tervalent metals. V. Thiocyanates of chromium diguanides, II, 251.
- Rây, P. R., and Sarkar, T. C., quinaldinic acid as analytical reagent. IV. Determination of zinc in presence of copper or of silver and mercury, I, 386.
- Ray, S. C., physical-chemical state of calcium in serum of ruminants, III, 1067.
- See also Morris, S.
- Ray, S. N., and Ganguly, R., metabolic activity of patients suffering from epidemic dropsy. I. Urinary composition of epidemic-dropsy patients, III, 276. Urinary composition of normal Bengalee subjects, III, 276.
- Ray, T. W., microchemical determination of manganese by oxidation with potassium persulphate, I, 157.
- Raybaut, M. See Balansard, J.
- Rayleigh, (Lord), nitrogen, argon, and neon in the earth's crust with applications to cosmology, I, 346.
- Raymond, A. L., Tipson, R. S., and Levene, P. A., substitution of glucose in position 4. II. β -Benzylglucoside 2:3-diacetate and its derivatives, II, 494.
- Raymond, E., and Bouvetier, E., determination of alcoholic and phenolic groups, II, 527.
- Raymond, W. D., *m*-dinitrobenzene reaction of ouabain and its application to the examination of East African arrow poison, II, 171. Native ecobolic drugs, III, 413.
- Raymond-Hamet, crystalline alkaloid of the Rubiaceae described by Schumann as *Adina rubrostipulata*, II, 564. Effect of hypertension on response to adrenaline, III, 140. Pharmacology of chalcipupa, III, 310. Hypotensive and vasodilator effects of cryptolepine, III, 310. Inversion of pressor effect of adrenaline [by alcohol], III, 478. Hypotensive and sympatholytic effects of hydrocinchonidine, III, 504. Action of ephedrine on renal blood vessels, III, 612. Vaso-dilator effects of hydrocinchonidine, III, 776.
- Raymond-Hamet, effect of corynantheine hydrochloride on vascular effects of adrenaline and carotid sinus occlusion, III, 930. Abolition of adrenaline hypertension by donaxine, III, 978. Nicotine-like action of hordenine is not suppressed by the introduction into molecule of the second phenolic hydroxyl group in *m*-position, III, 1001. Lethal dose of sparteine sulphate in guinea-pig, III, 1004. Effect of ergometrine on vascular system, III, 1085. Physiological property of aqueous extracts of *Rauwolfia heterophylla*, Rœm. and Sch., III, 1085.
- Raynal, F. See Kling, A.
- Raynaud, A., masculinisation of female mouse embryos by dehydroandrosterone injections to the gestating mother, III, 143. Female genitals in intersex mice, III, 268. Fate of epididymis and Wolffian duct in intersex mice, III, 268. Evolution of male genital tract in intersex female mice, III, 268. Effect of testosterone on genital tract of intersex female mice, III, 481. Genital apparatus in intersexual mice, III, 755. Effect of oestradiol on pregnant mouse, III, 756. Feminisation produced by diethylstilbestrol, III, 982. Histological changes produced in urino-genital region of new-born mice by injection of oestradiol in the pregnant mother, III, 982. Ureter and accessory sex glands and organs in male intersex mouse, III, 984. Histology of urino-genital tract in new-born mice of both sexes, III, 1023.
- See also Lacassagne, A.
- Raynaud, R., Marill, F. G., and Xicluna, R., germinal hermaphroditism in man, III, 684.
- See also Tournade, A.
- Rayner, G. J. See Le Fèvre, R. J. W.
- Razumovski, V. V., structure and properties of high mol. wt. organic compounds, I, 455.
- Razvadovskaja, L. V. See Knunianz, I. L.
- Rea, C. E., treatment of the undescended testis with hormones, III, 688.
- See also Wangenstein, O. H.
- Rea, F. W. See Toomey, J. A.
- Read, B. E. See Chu, T. J.
- Read, D. R., and Taylor, William, hydrolysis of triphenylmethyl chloride in dioxan, II, 211.
- Read, F. E., determination of manganese, especially in biological material, I, 578.
- Read, J. See Gray, L. H., and Spear, F. G.
- Read, John, and Hendry, J. A., preparation of *N*-methylmenthylamines by a new method of *N*-alkylation, II, 79.
- See also Malcolm, D., and Short, A. G.
- Read, J. M., incidence of exophthalmic goitre, III, 376.
- Reames, H. R. See Lennette, E. H.
- Reasenber, J. R., Lieber, E., and Smith, G. B. L., promoter effect of platinic chloride on Raney nickel. II. Effect of alkali on various groups, I, 208.
- Rebay, A. von. See Helberger, J. H.
- Rebbe, O. See Hahn, L. A., and Hevesy, G. O.
- Rebek, M., and Mandrino, G., action of Grignard reagent on heptachloropropane, II, 2.
- Rebel, H. H., teeth and internal diseases, III, 488.
- Rebonl, G., radioactive phenomena of the second order, I, 231. Effect in gases submitted to the action of ultra-violet light, I, 441.
- and Perrier, F., property of air ionised by X-rays, I, 169. Residual ionisation of gases submitted to the action of X-rays, I, 442.
- and Thibaud, E., emission of ionising radiations from salts of common metals, I, 236.
- Reboul, J., action of X-rays on biological structures, III, 419, 514.
- and Rosenblueth, A., action of alternating currents on electrical excitability of nerve, III, 664.
- See also Rock, J.
- Reboul, J. A., ionising radiation emitted by ordinary metals, I, 297. Electrical phenomena of the internal ear and their rôle in the theories of audition, III, 134.
- See also Déchéne, G.
- Recchi, E. See Sartori, M.
- Reck, W. See Domenici, F.
- Recorder, R. F., spectrographic analysis, I, 156.
- Record, B. R. See Carter, S. R.
- Record, P. R., Bethke, R. M., and Wilder, O. H. M., vitamin-A requirements of chicks: comparative efficiency of carotene and vitamin-A, III, 73.
- See also Bethke, R. M.
- Rector, C. See Riebsomer, J. L.
- Redaelli, P., and Nenceva, N., thymus gland and Foà-Kurloff bodies, III, 680.
- Reddemann, H., and Bomke, H., absorption of slow neutrons in uranium, I, 504.
- See also Droste, G. von.
- Reddish, G. F. See Burlingame, E. M.
- Reddy, A. R., development of the mesonephros of *Bufo melanostictus*, III, 346.
- Redemann, C. A., and Dunn, M. S., general synthesis of α -amino-acids by means of ethyl benzamidomalonate, II, 495.
- Redemann, C. E. See Stewart, W. S.
- Reder, R., vitamin-D content of egg and egg oil products, III, 605.
- Redfield, A. C., and Keys, A. B., distribution of ammonia in waters of the Gulf of Maine, I, 495.
- Reding, R., effect of œstrone on pH of the blood, III, 57. Induced polypeptidæmia in cancer patients, III, 452. Insulin hypoglycæmia in cancer patients, III, 477. Antagonism between œstrone and ovarian extracts, III, 583. Carcinogenic substances in medicaments, III, 846. Determination of blood-cholesterol by two methods in cancer and other patients, III, 962.
- Joukovsky, N. I., and Timmerman, A. M., higher fatty acids and blood-lipins in cancer and other diseases, III, 491.
- See also Hustin, A.
- Redkin, I. A. See Schemjakin, M. M.
- Redlich, F. K., Weltmann's coagulation test in psychiatry and neurology, III, 32.
- Redlich, O., anharmonicity of CH vibrations and product rule, I, 552.
- and Klinger, H., cells without transference for pH determination, I, 626.
- Redowitz, E., test for occult blood [in faeces], III, 64.

- Reece, R. P., effect of oestrogen injections on lactogen content of female rat pituitary, III, 57. Initiation of lactation in the rat with lactogen and adrenal cortical hormone, III, 984.
- Hathaway, I. L., and Davis, H. P., lactogen content of pituitary gland of lactating rat, III, 474.
- and Mixner, J. P., effect of testosterone on pituitary and mammary gland, III, 983. See also Hathaway, I. L.
- Reed, C. I. See Plattner, E. B., and Struck, H. C.
- Reed, F. P., Robertson, A., and Sexton, W. A., benzthiazole derivatives. II. Conversion of 1-alkylthiolbenzthiazoles into 1-thio-2-alkyl-1:2-dihydrobenzthiazoles, II, 231.
- Reed, G. E. See Elvidge, A. R.
- Reed, J. C., nickel content of an Alaskan troctolite, I, 344.
- Reed, M. R., olfactory reactions of *Drosophila melanogaster* meigen to the products of fermenting banana, III, 254.
- Reekie, J., sensitivity of photographic films to X-radiation at very low temperatures, I, 481.
- See also Allen, J. F.
- Reekie, R. D. See Freyberg, R. H.
- Rees, A. G. See Cullinane, N. M.
- Rees, A. L. G. See Aickin, R. G., and Bayliss, N. S.
- Reese, H. H., hypoglycæmia and convulsive therapy in schizophrenia, III, 572.
- See also Vander Veer, A. H.
- Reese, J. D., and Moon, H. D., Golgi apparatus of the cells of the adrenal cortex after hypophysectomy and on administration of adrenocorticotrophic hormone, III, 42.
- Reeves, D. L. See Stuck, R. M.
- Reeves, R. E., saccharolactone methyl ester, II, 201.
- Reffert, H. See Koll, W.
- Reforzo Membrives, inter-relations between pituitary and thyroid, III, 474.
- Regamey, R., pasteurella meningitis, III, 204. Bacteriological blood examination [with sodium polyanethole-sulphonate], III, 306.
- and Riat, G., diphtheria immunisation, III, 202.
- Regener, E., and Ehmert, A., showers of cosmic radiation in the stratosphere, I, 174.
- Regirer, A. M., tension of saturated vapours, I, 248.
- Regner, E. G., and Ewert, B., electrocardiogram during cardiazol treatment of schizophrenia, III, 821.
- Régnier, J., David, Robert, and Bazin, S., effect of cocaine hydrochloride on cells of *Elodea canadensis*; evidence of a "potential toxic action," III, 949. Influence of the acid combined with cocaine on its effect on the leaves of *E. canadensis*, III, 949.
- David, Robert, and Sitri, R., effect of cocaine hydrochloride on the stickleback, III, 315. Effect of procaine hydrochloride on the stickleback, III, 315. Effect of the acid combined with novocaine base; narcotic action on *Gasterosteus aculeatus*, III, 1087.
- Gavaudan, P., and Quevauxviller, A., effect of cocaine hydrochloride on *Ascoidea rubescens* (Brefeld); possibility of production of a "potential toxic action," III, 873. Sensitivity of cells of *Ascoidea rubescens* (Brefeld) to action of cocaine, III, 1003.
- Régnier, J., and Lambin, S., bacterial multiplication as a function of the amount of nutritive substance in the culture medium, III, 434.
- and Quevauxviller, A., chronaxie and resistance of isolated nerves under local anaesthetics. I.—IV., III, 28, 369. Effect of local anaesthetics on imbibition of striated muscle, III, 186. Variations in imbibition of striated muscle in aqueous cocaine solutions, III, 186. Comparison of the mydriatic action of atropine sulphate, citrate, and phenylpropionate on the pupil of the enucleated frog eye, III, 673. Effect of various sodium salts on the pupil of *Rana esculenta*, III, 673. Effect of different salts of novocaine on mycelial filaments of *Ascoidea rubescens* (Brefeld), III, 873. Variation in pupil size of enucleated frog's eye, III, 971. Quantitative effect of atropine on enucleated eye of the frog, III, 972.
- Quevauxviller, A., and Guénin, J., imbibition by striated muscle, III, 1087.
- Regnier, M. T., action of testosterone propionate on gonads of viviparous cyprinodonts, III, 983.
- Regnier, V. See Caridroit, F.
- Rehbein, A., treatment of paroxysmal tachycardia, III, 965.
- Rehberg, P. B. See Blegen, E.
- Rehbinder, P. A., and Trapeznikov, A. A., mechanical properties and stabilising effect of adsorption layers and their dependence on surface concentration. I., I, 196, 467.
- See also Shigatsch, K. F.
- Rehm, S. See Stocker, O.
- Rehn, E., Haberer, H. von, Goetze, O., and Wagner, W., surgical shock, III, 659.
- Reich, H., and Reichstein, T., constituents of the adrenal cortex and related substances. XXVII. Δ^4 -3-Ketoandrostenyl-17-glyoxal and related substances, II, 553.
- Reich, W. S., esters of oses; azoyl [*p*-benzeneazobenzoyl] esters, II, 245. Separation of sugars by chromatography of their coloured esters, II, 245.
- Reichel, H., mechanics of heart during fatigue and recovery, III, 821.
- Reichel, L., and Burkart, W., chemistry and biochemistry of plant substances. III. Biogenetic relationships of the anthocyanidins to flavone pigments and catechins, III, 219. Liver enzymes. VII. Aldehyde dehydrogenase or aldehyde mutase? III, 939.
- and Reinmuth, W., production of fat from carbohydrate by *Endomyces vernalis*, III, 325.
- and Schmid, O., mechanism of synthesis of fatty acids and fats by the yeast *Endomyces vernalis*, III, 521.
- Reichel, W. S., case of hæmophilia and Graves' disease, III, 231.
- Reichert, W., material radiation in the emission from a hot cathode, I, 352.
- Reicheneder, F. See Hesse, G.
- Reichert, B., and Ivanov, D., 3-aryl-quinoline-4-carboxylic acids, II, 36.
- and Kampe, K. auf dem, 4-methoxy-3-chloromethylbenzaldehyde, II, 427.
- and Wilke, W., synthesis of barbituric acid derivatives with an acid side-chain, II, 127.
- Reichert, J. S., and Hull, H. G., control of p_H in peroxide solutions, I, 486.
- McNeight, S. A., and Rudel, H. W., determination of hydrogen peroxide and related peroxygen compounds, I, 335.
- Reichert, R. See Schöpf, C.
- Reichert, T., treatment of juvenile acne and senile pruritus with male sex hormone, III, 385.
- Reichert, W., and Schipkus, E., effects of combined applications of adrenaline and acetylcholine, III, 860.
- Reichinstein, D., secondary hydrogen evolution at the cathode, I, 378.
- Reichinstein, Z. G., oxidation-reduction indicators. II. Fuchsin and new-fuchsin as indicators in titration of tin and antimony with bromate, I, 625.
- Reichmann, V., value of Lehmann's apparatus for measuring dust-fixation in the nose, III, 782. Dust-fixing power of the nose and silicosis, III, 782.
- Reichrudel, E. M. See Spivak, G. V.
- Reichstein, S. I., and Kazarnovski, I. A., does potassium trioxide exist? I, 90.
- Reichstein, T., constituents of the adrenal cortex. XXI. Constitution of the substances R and S, II, 77.
- and Euw, J. von, constituents of the adrenal cortex. XXVIII. *allo*Pregnane-3:21-diol-20-one diacetate and *allo*pregnan-21-ol-3:20-dione acetate. XXX. Substance T, II, 552, 553.
- and Fuchs, H. G., Δ^4 -3-hydroxy-7-ketoethiocholic acid and related compounds, II, 552.
- and Gärtzi, K., constituents of the adrenal cortex. XXII. Constitution of substance L, II, 77.
- and Meystre, C., constituents of the adrenal cortex. XXV. *allo*Pregnane-3:17-diol derivatives of the 17(β) series; further evidence of the adherence of substances P and K to the 17(β) series, II, 317.
- Meystre, C., and Euw, J. von, constituents of the adrenal cortex. XXVI. Proof of the adherence of substance S to the 17(β) series, II, 553.
- and Montigel, C., constituents of the adrenal cortex. XXIX. Action of lead tetra-acetate on *allo*pregnanolone acetate, pregnenolone acetate, and progesterone, II, 552.
- Müller, H., Meystre, C., and Sutter, M., derivatives of Δ^4 -androsterone-3:17-diol-17-acetic acid and of Δ^5 -pregnene-3:17:21-triol, II, 318.
- See also Barnett, J., Morgan, W. T. J., Reich, H., Ruzicka, L., and Sutter, M.
- Reid, A. See Moll, T.
- Reid, C., indium, I, 622.
- See also Emeleus, H. J., and Maddock, A. G.
- Reid, Charles, comparison of metabolic pathways of glycine and alanine, III, 707.
- Reid, C. G. See Gammon, G. D.
- Reid, D. E. See Teel, H. M.
- Reid, E. E., Worthington, H., and Larchar, A. W., action of caustic alkali and of alkaline salts on alcohols, II, 96.
- See also Dillingham, W. B.
- Reid, G. C. K. See Dyke, S. C.
- Reid, J. D., and Browne, W. A., serological and biochemical study of hæmolytic streptococci from scarlet fever, III, 630.
- Reid, M. A. See Pratt, F. H.

- Reid, *M. E.*, effect of light on accumulation of ascorbic acid in young cowpea plants, III, 1110.
and Weintraub, *R. L.*, synthesis of ascorbic acid in excised roots of the white moonflower, III, 882.
- Reid, *M. R.*, and McGuire, *J.*, arteriovenous aneurisms, III, 460.
- Reifenstein, *E.* See Davidoff, *E.*
- Reifenstein, *E. C.*, and Reifenstein, *E. C., jun.*, treatment of Addison's disease with sodium compounds, III, 140.
- Reifenstein, *E. C., jun.* See Reifenstein, *E. C.*
- Reifenstein, *G. H.*, case of erythraemia, gout, and subleukæmic myelosis, III, 547.
- Reifer, *I.*, micro-determination of total nitrogen in plant material, III, 733.
- Reiff, *F.*, and Toussaint, *S. M.*, stability and solubility of sodium stannate, I, 427.
- Reifferscheid, *W.*, and Schiemann, *R.*, Roentgenological proof of foetal intra-uterine respiratory movements, III, 824.
- Reigel, *C.* See Rhoads, *J. E.*
- Reiher, *H.*, tolerance of repeated hemorrhages in blood donors, III, 649.
See also Seggel, *K. A.*
- Reihlen, *H.*, simple arrangement for preparation of carbon dioxide free from air, I, 161.
- Reilhes, *R.*, value of methods used in animal histology for detection of glycogen in plant histology, III, 884.
- Reilly, *W. A.*, Lissner, *H.*, and Hinman, *F.*, pseudo-sexual precocity: the adrenal cortical syndrome in preadolescent girls, III, 260.
- Reimann, *H. A.*, acute infection of the respiratory tract with atypical pneumonia, III, 335.
See also Tocantins, *L. M.*
- Reimann, *S. P.*, and Miller, *B. J.*, artificially induced parthenogenetic activities in a human ovum, III, 478.
- Reimer, *L.*, action of anti-anæmic principle on blood formation in chick embryo, III, 7.
- Reimers, *F.*, stability of esters of *p*-hydroxybenzoic acid, II, 20. Determination of adrenalone in adrenalone hydrochloride, II, 44. Stability of solutions of nicotindithylamide, II, 134.
- Rein, *C. R.*, and Hazay, *C. E.*, Laughlan test for syphilis; modifications and a clinical and serological comparison with the Kline test and 4 complement fixation tests, III, 206.
- Reinacker, *H.* See Weidenhagen, *R.*
- Reinartz, *F.*, and Meessen, *K.*, degradation of dimethylcamphor in the animal organism; biological oxidation of methyl groups in terpenes, II, 121.
- Reinberger, *J. R.*, and Simkins, *C. S.*, analysis of a human ovotestis, III, 381.
- Reindel, *F.*, and Fleischmann, *O.*, determination of vitamin-B₂ in yeast, III, 791.
- Reindel, *W.*, action of albucid on urinary infections, III, 1083.
- Reindell, *H.*, kymographic and electrocardiographic examination of the heart of athletes. II, III, 19.
See also Bauer, *Hellmut.*
- Reinecke, *F.* See Staudinger, *H.*
- Reinecke, *H.* See Fischer, *Hans.*
- Reineke, *E. P.*, Peterson, *V. E.*, and Turner, *C. W.*, partition of serum-globulins of dairy goat, III, 553.
- Reiner, *J. M.*, diffusion in colloidal media, I, 610.
- Reiner, *L.*, Searle, *D. S.*, and Lang, *E. H.*, insulin preparations with prolonged activity. I. Globin insulin, III, 910.
- Reiner, *M.*, and Weiner, *S. B.*, sucrosuria in an infant, III, 1077.
See also Denzer, *B. S.*, and Weiner, *S. B.*
- Reiners, *H.*, chronic nephrosis, III, 391. Urea synthesis by perfused and damaged liver, III, 986.
and Watterott, *A.*, action of the thyroid gland in epileptiform conditions, III, 41.
- Reinert, *M.*, and Winterstein, *A.*, heparin, III, 815.
- Reingold, *H.*, and Brauninger, *H.*, conduction of electricity and diffusion in semi-metallic alloys. III. (Cu₂-Te), I, 137.
- Reingold, *L.*, energetic study of combustion at constant volume; fictitious and actual combustion, I, 30.
- Reinhart, *H. L.*, and Wilson, *S. J.*, mal-absorption of fat (intestinal lipodystrophy of Whipple), III, 1058.
- Reinhart, *K.*, relation of lead poisoning to parathyroid gland, III, 865.
- Reinhold, *H.*, Appel, *W.*, and Frisch, *P.*, homogeneous and α -Ag₂S-catalysed hydrogen sulphide reaction, I, 478.
- Reinicke, *R.*, spatial structure of pectins, III, 803.
- Reinie, *L.* See Giuntini, *J.*, and Levaditi, *C.*
- Reinke, *E. E.*, and Chadwick, *C. S.*, inducing land stage of *Triturus viridescens* to assume water habitat by pituitary implantations, III, 1045.
- Reinmuth, *W.* See Reichel, *L.*
- Reinov, *N.* See Veksler, *V.*
- Reinsberg, *C.*, quantum-mechanical calculation of the effect of pressure on spectral lines. I, I, 2.
- Reinstein, *H.* See Thannhauser, *S. J.*
- Reis, *J.* See Cardoso, *D. M.*
- Reis, *R. A.*, and Saphir, *O.*, masculinising elements in the ovary, III, 55.
- Reiser, *M.*, ascorbic acid investigations, III, 930.
- Reiser, *R.*, lipin changes in nerve degeneration in avitaminosis-A, III, 600.
See also Harrell, *G. T.*
- Reisner, *H.* See Pichler, *E.*
- Reiss, *C.*, determination of ascorbic acid in blood, III, 922.
- Reiss, *E.*, role of the liver in bacterial infections, III, 273.
- Reiss, *M.*, anterior pituitary and metabolism, III, 473.
Kusakabe, *S.*, and Budlowsky, *J.*, relationship between anterior pituitary and carbohydrate metabolism, III, 46.
and Peter, *F.*, action of corticotropic anterior pituitary substance on blood iodine, III, 47.
- Reiss, *P.*, effect of oxidation-reduction potential of the medium on proteolysis of barley, III, 948.
See also Nordmann, *J.*
- Reiter, *B.*, lack of homogeneity in the sternal bone marrow, III, 3.
- Reiter, *C.*, tyrosine determinations, II, 44.
- Reith, *J. F.*, and Dijk, *C. P. van.*, specificity of determination of lead with dithizone particularly in presence of thallium and bismuth, I, 386. Titration of bismuth with dithizone, I, 388.
- Reithel, *F. J.*, and Manville, *I. A.*, advantages of adding apple to milk formulae, III, 1065.
See also Manville, *I. A.*
- Reitman, *F.* See Fraser, *R.*
- Reitz, *A. W.*, and Wagner, *J.*, Raman effect. CIV. Nitrogen compounds. XIV. Acid amides, carbamide, guanidine hydrochloride, I, 510.
See also Kohlrausch, *K. W. F.*, Paulsen, *O.*, and Pendl, *E.*
- Reitz, *O.*, methods and results of application of isotopes in chemistry (with exception of heavy hydrogen), I, 155. Acid and base catalysis in light and heavy water. II. Hydrolysis and deuterium exchange of acetamide and acetonitrile, I, 206.
See also Bonhoeffer, *K. F.*
- Remberg, *H.*, extensibility of frog's muscle in contracture and tetanus, III, 662.
- Remezov, *I. A.*, nephelometric determination of amylase, III, 323.
- Remington, *R. E.* See Harris, *P. L.*
- Remington, *R. R.*, does fat in the diet affect the thyroid? III, 283.
- Rémion, *M.*, curves of excitability of maximal nerve response, III, 128.
- Remlinger, *P.*, and Bailly, *J.*, effect of high temperatures on rapidly dried viruses of Aujeszky's disease and of equine encephalomyelitis, III, 104. Is desiccation an attenuation factor of the rabies virus? III, 208.
- Remotti, *E.*, correlation between epithelia and blood-vessels and structure of organs and genesis of neoplasms, III, 698.
- Rempel, *S. I.*, thyatron thermoregulator, I, 158.
- Rensen, *D. B.* See Schmidt, *L. H.*
- Remund, *M. H.*, and Wehrli, *S.*, explosion of oxygen-ether mixture by static electricity during surgical anaesthesia, III, 1092.
- Rémy, *R. H.* See Peronnet.
- Renander, *A.*, cutis verticis gyrata (a symptom of acromegaly), III, 136.
- Renaud, *J.*, stability of wine yeasts, III, 1010.
- Renaud, *P.* See Costeanu, *G.*
- Renaux, *E.*, entraining of Forssman's antigen by olive oil, III, 797. Extraction of lipins from organs to be used for flocculation tests, III, 797.
- Renbom, *E. T.*, spontaneous hypoglycaemia, III, 743.
- Rencker, *E.*, properties of vitreous phenolphthalein, I, 190.
- Rendall, *L. M.*, and Wilson, *R. B.*, estimations of the amounts of pregnadiol, œstrin, and prolactin excreted during pregnancy complicated by threatened premature labour, III, 981.
- Rendleman, *H. A.* See Shriner, *R. L.*
- Renfrew, *A. G.* See Green, *M. H.*
- Renk, *F.* See Wohlisch, *E.*
- Renkonen, *E.* See Salmi, *E. J.*
- Renner, *F.*, models of elementary particles, I, 55.
- Rennie, *A. T.* See Walsh, *R. P.*
- Rennie, *J. B.*, effect of ingestion of food on plasma proteins, III, 961.
- Reinckamp, *F.*, fatty acids obtained by oxidation of a synthetic paraffin, II, 355. Separation of [constituents of] mixtures of dicarboxylic acids, II, 468.
and Schuler, *B.*, determination of blood-diastase, III, 13.
- Renoll, (*Miss*) *M. W.* See Henne, *A. L.*
- Renoux, *G.* See Lisbonne, *M.*
- Renqvist-Reenpaa, *Y.*, accuracy of single and double observations in the physiology of sensory organs, III, 36.
- Renshaw, *J. F.* See Bank, *J.*
- Renshaw, *R. J. F.* See Drake, *M. E.*

- Renshaw, R. R., and Cass, W. E., onium compounds. XXI. Pyrrolidinium analogues of choline and betaine, II, 337.
- Ziff, M., Brodie, B., and Kornblum, N., onium compounds. XX. Piperidinium analogues of choline and its homologues, II, 226.
- Renton, D. See Alexander, W.
- Rentschler, H. See Karrer, P.
- Rentz, E., effect of vagal stimulation on movements of large intestine, III, 388. Ineffectiveness of acetylcholine and histamine introduced into intestinal loops, III, 505.
- Renvall, M., non-dietary treatment of diabetics during pregnancy, III, 855.
- Renz, J. See Stoll, A.
- Repa, A. G. See Makarov, S. Z.
- Replöh, H., action of "paragen" on immunity conditions, III, 795. See also Jotten, K. W.
- Resch, H. U. See Kohn, J. L.
- Réso, Z. See Křepelka, J. H.
- Ressa, A. A. See Rawls, W. B.
- Ressovsky, N. W. T. See under Timoféeff-Ressovsky, N. W.
- Resta, L. S. See Rojas, P.
- Retan, G. M., intravenous injection of hypotonic salt solution containing sulphamylamide for streptococcal meningitis, III, 1080.
- Retovsky, R. See Prát, S.
- Reusch, B., species transformation, III, 442.
- Reuse, J., effect of potassium amyloidsulphate on blood coagulation in rabbit, III, 960.
- Reuss, L., Sigmar, M., and Roller, O., action of follicle hormone in Cushing's disease, III, 839. See also Siedek, H.
- Reutenauer, G. See Dumanois, P.
- Reuter, F., and Welch, R. B., derivatives of tetrone acid, II, 517. See also Bolliger, A.
- Reuter, F. A., sulphanilamide in urology, III, 303.
- Reuter, L., properties of protoplasm in yellowed leaves, III, 537.
- Reuther, H. See Simon, Arthur.
- Reuther, W. See Boynton, D.
- Reveley, W. G. See Lutz, R. E.
- Revol, L. See Enselme, J.
- Revoltella, G., aetiology of experimental tumours; effect of sex hormones and steroids on the appearance of tumours produced by 1:2-benzpyrene, III, 396.
- Rex, K. B. See Lissak, K.
- Rey, P., effect of removal of [anterior] lobe of pituitary on annual cycle of the male sex cells of *Bufo vulgaris*, III, 678. Effect of removal of principal lobe of pituitary gland in *Bufo vulgaris*, III, 972.
- Reyerson, L. H., Johnson, O., and Bemmel, C., chemical separation of the isotopes of hydrogen, I, 482.
- Reyling, G. F., laboratory fractionating column, I, 582.
- Reymann, G. C. See Walbum, L. E.
- Reyner, C. E., pigmentation following use of iron salts, III, 1089.
- Reynolds, E. H. See Hammick, D. L.
- Reynolds, E. R., treatment of pericarditis [with vitamin-B₁], III, 766.
- Reynolds, F. M., occurrence of barium in coal, I, 288.
- Reynolds, H., Hoehn, W. M., and Werkman, C. H., occurrence of acetaldehyde as intermediate during fermentation of glycerol by *coli-aërogenes* bacteria, III, 1100.
- Reynolds, L., Maey, I. G., and Souders, H. J., gastrointestinal response of children to test meals of barium and pasteurised, evaporated, and base-exchanged milks, III, 985. See also Hamil, B. M.
- Reynolds, M. R., and Slobody, L. B., use of sulphapyridine in pneumonias of childhood, III, 999.
- Reynolds, R. See Kerridge, P. M. T.
- Reynolds, S. I. See Race, H. H.
- Reynolds, S. J. See Kerridge, P. M. T.
- Reynolds, S. R. See Kerridge, P. M. T.
- Reynolds, S. R. M., activation of uterine muscle by œstrin and its relation to uterine growth, III, 382. Acetylcholine content of uteri before and after administration of œstrin to ovariectomised rabbits, III, 586.
- Reynolds, T. M. See Mackney, A. W.
- Rezek, A., formation of formaldehyde from percarbonate, II, 49. and Gilar, M., influence of electrolyte solutions on sugar metabolism, III, 501. and Marić, L., "Dadino vrclo," a sulphur-containing thermal spring at Tuheljske Toplice, I, 283.
- Reznikoff, P., polycythæmia, III, 741.
- Rezzesi, F. D., innervation of ear and effect of local continuous trauma in rabbits, III, 917. Production of precancerous conditions by mild continuous trauma, III, 917.
- Rheinboldt, H. [with Braun, P., Flume, E., König, O., and Lauber, A.], choleic acids. V. Choleic acids containing aliphatic hydrocarbons, II, 479. [with Lauber, A.], molecular compounds of bile acids with sterols. IV. Cholesterol, II, 477. and Mott, F., existence of aliphatic sulphonyl chlorides and bromides, II, 240. and Motzkus, E. [with Schulte, M., and Mott, F.], sulphur alkyl iodides or sulphenyl iodides, II, 240. and Tappermann, F. [with Kleu, H.], thionitrites. IV. History of nitrosylmercaptides or thionitrites, II, 309.
- Rhijn, A. E. A. van. See Boeseken, J.
- Rhineland, F. W., jun., Bennett, G. A., and Bauer, Walter, exchange of substances in aqueous solution between joints and the vascular system, III, 363.
- Rhines, F. N., and Wells, C., diffusion in solid metals; influence of microstructure, I, 193. See also Mehl, R. F.
- Rhoades, R. See Adams, A. E.
- Rhoads, C. P., vitamin-B₁₂ therapy, III, 1070. See also Dobriner, K., MacLeod, J., and Miller, D. A.
- Rhoads, J. E., peritoneal lavage in treatment of renal insufficiency, III, 390. and Panzer, L. M., prothrombin time of "bank blood," III, 550. and Stein, E., splenectomy and ligation of gastric coronary vessels; effect on œsophageal varices in a case of Banti's syndrome with early hæmatemesis, III, 1057.
- Stengel, A., jun., Reigel, C., Cajori, F. A., and Frazier, W. D., absorption of protein split products from chronic isolated colon loops, III, 843.
- Rhodes, J. E. W., effect of alcohols on the partial pressure of acetone, I, 471.
- Rhodes, F. H. See Winding, C. C.
- Ri, H. See Kaku, T.
- Ri, K., nitrogenous substances in muscle layer and mucous membranes of duodenum and large intestine [of dogs], III, 690.
- Riad Bey, M., congenital familial cataract with cholesterol deposits, III, 835.
- Riat, G. See Regamey, R.
- Ribalko, F. See Bugakov, W.
- Ribaud, G., effective molecular heats and their use in calculation of combustion temperatures, I, 420. and Vasilescu, V., viscosity of gases at high temperatures, I, 462.
- Ribère, M. See Thiodet, J.
- Ribin, V. A., colchicine-induced tetraploidy in flax, III, 732.
- Ribner, H. S., anomalies in the directional intensity distribution of cosmic rays, I, 445.
- Riboulleau, J., œstrogen content of virgin and fertilised birds' eggs, III, 383. Œstrogen content of chicken egg during incubation, III, 479.
- Ricard, R., and Valancogne, F., spectrum of rubidium in the far ultra-violet (2000–1030 Å.), I, 111.
- Ricart, R. See Raffy, A.
- Ricca, O. See Deotto, R.
- Ricci, A. See Auméras, M.
- Ricci, J. E. See Davis, T. W., and Swenson, T.
- Rice, C. H., phytoplankton in the Thames, I and II, III, 101.
- Rice, C. O. See McClendon, J. F.
- Rice, E. E. See Rose, W. C.
- Rice, F. O., attempts to prepare the methylene radical by the thermal decomposition of hydrocarbons, II, 95. and Herzfeld, K. F., mechanism of chain reactions, I, 668. and Polly, O. L., decomposition of hydrocarbons induced by free radicals, I, 526. and Schildknecht, C. E., photochemical oxidation of acetone, I, 89. and Teller, E., rôle of free radicals in elementary organic reactions, II, 237.
- Rice, H. V. See Henderson, V. E.
- Rice, J. H. See Allen, F. M.
- Rice, O. See Hatch, G. B.
- Rice, O. K., solid-liquid equilibrium in argon, I, 190. and Campbell, H. C., explosion of ethyl azide in the presence of diethyl ether, I, 568.
- Rice, W. W. See Crawford, B. L., jun., and Kistiakowsky, G. B.
- Rich, G. T. See Fleisher, M. S.
- Rich, M. L. See Schiff, L.
- Richard, A., evipan anaesthesia, III, 864.
- Richard, M. B. See Mutch, J. R.
- Richard, R. See Beer, A. G.
- Richards, A. N., processes of urine formation, III, 596.
- Bott, P. A., and Westfall, B. B., inulin secretion by renal tubules, III, 152.
- Richards, D. A. See Bound, M.
- Richards, E. H., effect of temperature on a mixed culture of two organisms in symbiotic relation, III, 725.
- Richards, J. A., jun. See Mouzon, J. C.
- Richards, J. H. See Hollis, (Miss) F.
- Richards, M. B. See Irving, J. T.
- Richards, O. W., and Hawley, A. J., mould elimination in marine laboratories, III, 426.
- Richards, T. See Ashley, J. N.

- Richards, W. T., supersonic phenomena, I, 514.
- Richardson, E. G., supersonic dispersion and infra-red radiation, I, 360.
- Richardson, E. M. See Buchman, E. R.
- Richardson, G. See Morton, A. A.
- Richardson, G. A. See Jukes, T. H.
- Richardson, G. M. See McIlwain, H.
- Richardson, H. B., Simmonds' disease and anorexia nervosa, III, 378.
- Richardson, J. R., radiations from radioactive substances: ^{198}Au , ^{152}Eu , ^{106}Ag , ^{64}Cu , and ^{13}N , I, 295.
- Richardson, J. S., effect of adrenal cortical extract on basal metabolic rate in thyrotoxicosis, III, 579.
- and Doll, W. R. S., juvenile form of the adreno-genital syndrome, III, 580.
- Richardson, O. W., test of the wave mechanics in molecular spectra and spectrum of H α , I, 6.
- Richardson, R. S., and Minkowski, R., spectra of bright chromospheric eruptions from 3300 to 11500 Å., I, 440.
- Riechdorf, L. F., and Ford, W. H., hyperpyrexia in the newborn, III, 393.
- Richert, C. See Leroux, R., and Maranon, G.
- Richlikov, G., and Bruns, B., surface structure of gels. I. Heat of wetting of silicic acid gels, I, 563.
- Richmond, E. L., granulocytopenia following surgical sepsis treated with adenine sulphate, III, 891.
- Richmond, W. E., tarbuttite, I, 164.
- and Gonyer, F. A., pollucito [and petalite], I, 164.
- and Wolfe, C. W., crystallography of lanarkite, I, 164.
- See also Palache, C.
- Richou, R., and Djourichitch, M., immunising value of anatoxins derived from toxins grown on synthetic medium, III, 727.
- and Rastegar, R., effect of simultaneous injection of sulphamylamide and staphylococcus anatoxin on production of specific antitoxin, III, 999. Immunological results of associated injections of tetanus anatoxin and sulphamylamide in rabbit, III, 999.
- See also Boivin, A., Ramon, G., and Sandor, G.
- Richter, C. P., factors determining voluntary ingestion of water in normals and in individuals with maximum diabetes insipidus, III, 174. Salt taste thresholds of normal and adrenalectomised rats, III, 477.
- and Barelare, B., jun., persistence of the 4- to 5-day activity cycles in vitamin-A-deficient rats with constant cornification of the vaginal epithelium, III, 479.
- Holt, L. E., jun., and Barelare, B., jun., nutritional requirements for normal growth and reproduction in rats studied by the self-selection method, III, 160.
- Holt, L. E., jun., Barelare, B., jun., and Hawkes, C. D., changes in fat, carbohydrate, and protein appetite in vitamin-B deficiency, III, 401.
- Richter, D. See Bhagvat, K.
- Richter, E. F., constitution of the hot-cathode discharge in the neighbourhood of hollow hot cathodes, I, 393.
- Richter, F. See Brederick, H.
- Richter, H. (Innsbruck). See Jarisch, A.
- Richter, H. (Prag). See Saechting, H.
- Richter, Hans, circulatory reflexes and liver volume, III, 362.
- and Schrocksnadel, H., mistletoe bradycardia, III, 506.
- Richter, H. J. See Koelsch, C. F.
- Richter, J., gold sol reaction [for syphilis], III, 527.
- Richter, R. See Pohlman, R.
- Richter, Rudolf, spasmolytic action of residue alkaloids of *Lobelia inflata*, III, 931.
- Richtmyer, N. K., 2:4:6-trimethyl- β -phenyl- and -benzyl-D-glucoside, II, 468.
- Adams, M., and Hudson, C. S., behaviour of glucose dimethyl acetal towards carbohydrases, II, 407.
- Hann, R. M., and Hudson, C. S., oxidative degradation of percellose to L-galactonic acid, II, 143. Oxidative degradation of sedoheptulose to D-altronic acid, II, 143.
- and Hudson, C. S., crystalline D-altrosan, II, 98. Cleavage of cellobiose and celtribiose by emulsin, II, 408.
- Richtmyer, R. D., theory of the X-ray lines LL-LM, I, 502.
- Rickett, H. F. See Alder, K.
- Ricketts, H. T., carbohydrate tolerance after protamine-insulin, III, 50.
- Rickman, E. See Levschin, V.
- Rickson, C. C., Heckel, G. B., and Knutti, R. E., blood plasma-proteins as influenced by liver injury induced by carbon tetrachloride and gum acacia, III, 11.
- Riddell, A. R., tuberculosis in industry, III, 620.
- Jephcott, C. M., and Irwin, D. A., fatal case of uncomplicated silicosis, III, 316.
- Riddell, V., blood transfusion with the rotary pump, III, 742.
- Riddle, E. H. See Marvel, C. S.
- Riddle, M. C. See Isaacs, R.
- Riddle, O. See Bates, R. W., Lahr, E. L., and Schooley, J. P.
- Rideal, E. K., simple molecular mechanism for heterogeneous catalytic reactions, I, 206. Hydrocarbon chemistry, II, 465. Film reactions as a new approach to biology, III, 1094.
- See also Bikerman, J. J., Craxford, S. R., Cuthbertson, A. C., Palmer, R. C., Stenhagen, E., and Twigg, G. H.
- Ridenour, L. N., Henderson, W. J., Henderson, M. C., and White, M. G., radioactivity induced by α -particles, I, 4.
- See also Delsasso, L. A., and White, M. G.
- Rider, T. H., and Cook, E. S., pharmacologic studies on diothane hydrochloride, III, 186.
- Ridley, P. See Brindley, G. W.
- Ridout, J. H. See Best, C. H.
- Riebeling, C., drug treatment of psychoses, III, 374.
- Riebler, R. See Creutzfeldt, H. G.
- Riebsomer, J. L., Baldwin, R., Buchanan, J., and Burkett, H., preparation of substituted mandelic acids and their bacteriological effects. II, II, 62.
- Bishop, J., and Rector, C., composition of seeds of *Asimina triloba*, III, 342.
- Riechert, W., and Muschold, W., after-effects of acetylcholine injections, III, 930.
- Riecke, H. G., congenital deafness, III, 135.
- Riedel, H., formation of methemoglobin by urine, III, 66. Methemoglobin formation. XII. Urine. XIII. Pyridine, III, 650, 844.
- Riedel, L., variation of the specific resistance of platinum with cross-section, I, 309.
- Rieder, W., treatment of thrombangitis obliterans, III, 562.
- and Heinrich, A., case of islet adenoma of the pancreas cured by operation, III, 581.
- and Seggel, K. A., results of splenectomy in various diseases of the blood, III, 549.
- Riediger, K., blood restitution, III, 546.
- Riedl, I. P. See Siedek, H.
- Riege, A. See Pannhorst, R.
- Riegel, B., Schweitzer, C. E., and Smith, P. G., physicochemical concentration of vitamin-K, III, 924.
- See also Fieser, L. F.
- Riegel, C. See Johnson, Julian.
- Riegelbauer, G. See Pummerer, R.
- Rieger, W. H. See Marvel, C. S.
- Riegert, A. See Schwartz, A.
- Riehl, N., luminescent zinc sulphide and other luminous substances, I, 124.
- See also Graue, G.
- Rieke, C. A. See Franck, J.
- Rieke, F. F. See Oldenberg, O.
- Rieke, F. R., quantum efficiency of photosynthesis, I, 331.
- Riemenschneider, R. W., Ellis, N. R., and Titus, H. W., fatty acids in lecithin and glyceride fractions of egg yolk, III, 69.
- Wheeler, D. H., and Sando, C. E., identity of α - and β -linoleic acids, II, 138.
- Riemsdijk, M. van, elimination of oxygen from surface of anaerobic plates, III, 880.
- Rienhoff, W. F., and Gay, L. N., treatment of intractable bronchial asthma by bilateral resection of the posterior pulmonary plexus, III, 240.
- Ries, E., [effect of sodium cacodylate and colchicine on] mitosis in tissues, III, 740. Importance of "mosaic" in ascidian development, III, 956. Significance of specific mitotic poisons in general biological problems, III, 1024.
- Ries, H. E., jun., pressure-area relations for unimolecular films of tri-*p*-tolyl phosphate and related compounds, I, 74.
- Riese, W., histology of cerebral cortex of the newborn bear, III, 467.
- Riesenfeld, E. A., and Lichtenberg, H. L., complementary feedings in 1182 newborn infants, III, 160.
- Riesenfeld, E. H., thermal dissociation of oxygen, I, 471.
- Riess, O. See Schreiber, H.
- Riesser, O., effect of large doses of caffeine on muscular metabolism in rats, III, 567.
- Riesz, C. H. See Komarewsky, V. I.
- Rietschel, H., vitamin-C requirements and hypovitaminosis-C, III, 288. Optimal and minimal vitamin-C requirements in man, III, 704. Hypervitaminosis-C, III, 852.
- and Mensching, J., experimental vitamin-C deprivation in man and vitamin-C requirements, III, 604.
- Rietschel, H. G., tachyphylaxis, III, 746.
- Rieveschl, G., jun. See Ray, F. E.
- Riewe, K. H., and Rompe, R., position numbers of electron terms in a partly ionised gas, I, 2.
- Riezler, W., stopping power of mica for α -particles of small range, I, 395. Ionisation and range of α -particles in sulphur hexafluoride, I, 396.

- Rigal, R., the Salinas grandes of Cordoba province [Argentina], I, 435.
- Rigamonti, R., structure and chemical constitution of ferrocyanides, I, 185. Structure of cupriferrrocyanides. III. Double exchange reactions between cupriferrrocyanides and bivalent cations, I, 209.
- Rigaud, anomalous right subclavius muscle, III, 888.
- and Morcau, multiple anomalies of the liver, III, 806.
- See also Breton, A.
- Rigby, W. See Linnell, W. H.
- Rigdon, R. H., effect of heat on hæmolytic and skin-necrotising factors in staphylococcus toxin, III, 332. Experimental nephritis produced by staphylococcus toxin in dog, III, 760.
- Righetti, (Mme.) Y., *l*-menthyl dialkylbetaine acetates, II, 79.
- Rigler, R. See Ehrhart, G.
- Rigterink, M. D., and France, W. G., adsorption at crystal-solution interfaces. X. Adsorption of monoazo-dyes by crystals of potassium sulphate during their growth from solution, I, 22.
- Rijckaert, G. See Maisin, J.
- Rijlant, P., measurement of refractory period of modulatory mechanism of central inspiration, III, 967. Modification of central inspiratory activity by rhythmic excitation of bulbar nuclear areas, III, 967. Variations in central modulation frequency during inspiration, III, 967. Simultaneous stimulation of efferent fibres of the primary respiratory centre and modulatory mechanism of inspiration, III, 967.
- Rijnberk, G. van. See Bouman, H. D.
- Rijnders, G. W. A. See Gerding, H.
- Rijst, M. P. J. van der, and Arons, P., D-avitaminosis causing paralysis in rats, III, 497.
- Rijswijk, W. E. van. See Böeseken, J.
- Rik, G. R. See Gurevitch, I. I.
- Riker, A. J., and Nagy, R., cell stimulation by chemicals in relation to crown gall, III, 437.
- See also Nagy, R.
- Riley, D. P., and Fankuchen, I., derived Patterson analysis of the skeleton of the cyclol C₂ molecule, I, 512.
- See also Bernal, J. D.
- Riley, E. C., and DallaValle, J. M., quartz-fusing operations; measurement and control of silica fumes, III, 621.
- See also Flinn, R. H.
- Riley, G. M., and Witschi, E., comparative effects of light stimulation and administration of gonadotropic hormones on female sparrow, III, 56.
- Riley, I. D., metabolic eczema in idiopathic steatorrhœa, III, 407.
- Rimann, E., nephrite and asbestos from Paakila, Finland, I, 541.
- Rimashevskaja, J. A. See Sehorigin, P. P.
- Rimattei, F., Grimaud, (Mme.) L., and Gerbeau, C., physical chemical analysis in the chemical survey of the Marseilles canal water, I, 495.
- Rimington, C., occurrence of coproporphyrin-III, III, 695. Turacin, the copper porphyrin pigment of Musophagide, III, 814.
- and Hemmings, A. W., porphyrinuric action of drugs related to sulphanilamide; comparative toxicity, therapeutic efficiency, and causation of methemoglobinemia and relation to structure, III, 858.
- Riml, O., adrenal hypertrophy in long-distance runners and in animals, III, 43. Cortin-deficiency states, III, 581.
- Rinck, J. B., and Sponholz, G., hypoglycemia and pancreatic calculi, III, 64.
- Rinderknecht, H., Noble, R. L., and Williams, P. C., extraction of gonadotropic principle from pregnant mare serum, III, 576.
- See also Noble, R. L.
- Ring, J. C., thyroid stimulation by cold; effect of changes in body temperature on basal metabolism, III, 679.
- Ringbom, A., accuracy of colorimetric methods of analysis. I, I, 212.
- and Sundman, F., accuracy of colorimetric methods of analysis. II, I, 212. Theory and practice of photo-electric volumetric analysis, I, 275.
- Ringebach, G. See Jeanneney, G.
- Ringer, P. H., non-statistical evaluation of artificial pneumo-thorax, III, 824.
- Ringier, B. H. See Karrer, P.
- Ringler, B. H. See Demole, V., and Karrer, P.
- Ringsted, A. See Einarson, L.
- Rink, E. H. See Thomas, C. P.
- Rinkel, M., and Pijoan, M., cholinesterase activity. I. Manometric method of assay, III, 84.
- Rinkes, I. J., action of nitric and sulphuric acids on 5-bromo-3:6-dinitro-1:2:4-trimethylbenzene. I—III, II, 111, 159, 315. Oxidation of cyclopentenones, II, 481.
- Rintelen, J. C. See Gross, P.
- Rinzler, H. See Nelson, J.
- Rioch, D. McK., Nelson, C., and Dempsey, E. W., effects of prolonged stimulation of afferent nerves on the reflexes evoked, III, 370.
- See also Dempsey, E. W.
- Riou, P., and Delorme, G., distribution of manganese and of iron in ashes and elms of Quebec, III, 438. Distribution of manganese and of iron in the principal deciduous trees of Quebec, III, 883.
- Ripan-Tilici, R., conductometric determination of selenious acid with lead ions, I, 96. Potentiometric determination of selenious acid with lead ions using electrodes of the third kind, I, 96. Conductometric determination of selenious acid with silver ion, I, 429. Potentiometric determination of selenious acid with silver ion, I, 486. Argentometric titration of selenious acid, I, 624.
- Ripley, H. S. See Papanicolaou, G. N.
- Risch, W. See Ostwald, A.
- Rischel, A. See Lundstein, E.
- Rischkov, V. L., and Smirnova, V. A., accumulation of tobacco mosaic virus in plants deprived of nitrogen, III, 947.
- and Souchof, K. S., fermentative activity of tobacco mosaic virus, III, 530.
- Riser, M., and Valdigue, P., passage of sulphamide derivatives into the nervous centres, III, 773. Concentration of sulphonamide derivatives in nervous centres after prolonged absorption, III, 928.
- Valdigue, P., and Guiraud, J., passage into the brain of urea injected into the blood, III, 31.
- Rishov, V. P. See Kashtanov, L. I.
- Risi, A., hypoglycemic action of oxidase from *Cynara scolymus*, III, 553. Effect of bromide on composition of blood, III, 616. Treatment of barium poisoning by an antidote, III, 865.
- Risi, A., 3:5-dinitrophenol, III, 934. Toxic effects and excretion of gelsemine, III, 934.
- Rising, L. W. See Wilson, C. O.
- Riskaltschuk, A. T. See Tolstopiatov, V. M.
- Riskin, I. V., preparation of ferric oxide by various oxidative procedures. II. Reaction of ferrous sulphate with potassium chlorate, in aqueous solution. III. Oxidation of metallic iron by air in presence of ferrous salts and accelerators, I, 93, 212.
- Risley, P. L., seasonal changes in testis of musk turtle, *Sternotherus odoratus*, L., III, 888.
- Riss, J. G., thermodynamic relation between dissociation pressure and solubility of complex strong electrolytes, I, 564.
- and Seljanskaja, A. I., thermal dissociation of chromium trioxide, I, 32.
- Rissel, E., vitamin-D formation in liver disease, III, 493.
- Risser, J. R. See Lark-Horovitz, K.
- Rist, N., effect of sulphanilamide and *p*-diaminodiphenyl sulphone on the culture of tubercle bacilli of mammals and birds, III, 877.
- Bloch, F., and Hamon, V., inhibiting action of sulphanilamide and of *p*-diaminodiphenylsulphone on multiplication of avian *B. tuberculosis* in vivo, III, 877.
- Ritchey, H. W., and Hunt, H., activity coefficients of ammonium chloride in liquid ammonia at 25°, I, 322.
- Ritchie, D. See Blackie, J. J.
- Ritchie, E. See Burrows, G. J., Hughes, G. K., and Lions, F.
- Ritchie, W. S. See Holland, E. B.
- Ritschl, R., Stark effect of Balmer lines after passage of atoms through a very strong electric field, I, 393.
- and Siksna, R., connexion between strengthening and weakening of series by the electric field, I, 1, 111.
- Ritsert, K., excretion of aneurin, III, 165. Determination of aneurin in small samples of blood by the thiochrome method, III, 851. Determination of nicotinic acid and its amide in urine, tissues, and blood, III, 921.
- Rittenberg, D., Keston, A. S., Rosebury, F., and Schoenheimer, R., protein metabolism. II. Determination of nitrogen isotopes in organic compounds, II, 235.
- Schoenheimer, R., and Keston, A. S., protein metabolism. IX. Utilisation of ammonia by normal rats on a stock diet, III, 706.
- See also Keston, A. S., Schoenheimer, R., and Vickery, H. B.
- Ritter, G. See Benrath, A.
- Ritter, G. J. See Parker, E. A.
- Ritter, H., shortened auriculo-ventricular conduction time with bundle branch block and paroxysmal tachycardia, III, 744.
- Ritterhoff, automatic measuring device for liquids, I, 281.
- Rittmann, A., volcanism and the chemistry of magmas, I, 109.
- Ritzer, J. E. See Shrader, S. A.
- Ritzman, E. G., Washburn, L. E., and Benedict, F. G., basal metabolism of the goat, III, 854.
- Ritzman, J. See Goettsch, M.
- Rivera, V., distant biological action of metals through glass, III, 622.
- See also Vergano, R. M.

- Rivers, T. M., viruses and virus diseases, III, 335.
- Ward, S. M., and Smadel, E., infectious myxomatosis of rabbits, III, 529.
- Rivière, M., and Pouchard, P., utero-placental apoplexy, III, 979.
- Rivin, M. See Bresquer, R.
- Rivlin, I. I. See Adadurov, I. E.
- Rivoire. See Cossa.
- Rivoire, R., Gayet, R., Bermond, A., and Moreau, F., blood-fructose test of liver function, III, 65.
- Rix, E., and Schulte, F. H., influence of cholesterol and olive oil on effects of ultra-violet rays and X-rays in tadpoles, III, 318. Influence of cholesterol on effect of ultra-violet rays on the pig's skin, III, 318.
- Rix, W. See Dawihl, W.
- Rixford, E., and Gray, H., diabetes insipidus with big [urinary] bladder (capacity 2 litres), III, 275.
- Rjabtschikov, D. I., strength of isomeric complex bivalent platinum bases, I, 79.
- See also Grünberg, A. A.
- Roach, F. E., relative abundance of CN, C₂, CH, NH, and OH in the solar reversing layer, I, 239.
- Roach, W. A., plant injection as a physiological method, III, 802.
- Roback, H. N. See Eisner, E.
- Robb, J. V. M. See Glen, W. L.
- Robb, P. D. See Phillips, R. A.
- Robberecht, J., piezometric researches. V. Anisotropic liquids under pressure, I, 134.
- Robbers, H., and Westenhoeffer, O., action of lactoflavin and adrenal cortex on the renal and phloridzin glycosuria, III, 844. Role of tyramine in arterial hypertension, III, 897.
- Robbins, B. H., Baxter, J. H., jun., and Fitzhugh, O. G., cyclopropane. V. Effect of morphine, barbital, and amyral on concentration of cyclopropane in the blood required for anaesthesia and respiratory arrest. VII. Analysis of factors controlling heart rate in dogs anaesthetised with cyclopropane or ether after premedication with morphine, III, 508, 863. Action of morphine in slowing the pulse, III, 778.
- Robbins, W. J., thiamine and plant growth, III, 732.
- and Kavanagh, F., thiamine and growth of *Pythium butleri*, III, 201.
- and Schmidt, M. B., growth of excised roots of the tomato, III, 214. Vitamin-B₆, a growth substance for excised tomato roots, III, 437.
- Roberg, M., and Marchal, E., distribution and variation in contents of saponin in plants and seeds, III, 636.
- See also Engel, H.
- Robert, C., vapour pressure measurements on indium halides, I, 67.
- Roberts, C. P., and Fulton, F. T., progressive electrocardiographic changes in pericarditis, III, 360.
- See also Dustin, C. C.
- Roberts, D. I. See Bowden, S. T.
- Roberts, E. See Griffith, J. Q., jun.
- Roberts, E. A. H., fermentation process in tea manufacture. II. Properties of tea peroxidase. III. Mechanism of fermentation, III, 720.
- See also Harrison, C. J.
- Roberts, E. R., Emeleus, H. J., and Briscoe, H. V. A., preparation and properties of ethyldeuteramine and dimethyldeuteramine, II, 100.
- Roberts, E. W. See Owen, E. A.
- Roberts, F. H. S., treatment of oesophagostomiasis in sheep with phenothiazine, III, 1085.
- Roberts, H. S., direct measurement of silicate heats of melting, I, 201.
- Roberts, J., Thode, H. G., and Urey, H. C., concentration of ¹³C by chemical exchange, I, 210.
- and Urey, H. C., mechanism of acid-catalysed ester hydrolysis, esterification and oxygen exchange of carboxylic acids, I, 617. Kinetics of the exchange of oxygen between benzoic acid and water, I, 617.
- See also Urey, H. C.
- Roberts, J. K., effects of dipole interaction on heats of adsorption, I, 28. Theory of adsorption when each particle occupies more than one site, I, 195.
- and Miller, A. R., application of statistical methods to immobile adsorbed films, I, 560.
- and Orr, W. J. C., induced dipoles and heat of adsorption of argon on ionic crystals, I, 28.
- Roberts, L. D., and Mangold, G. B., jun., properties on concentrated solutions of sodium carbonate, I, 605.
- Roberts, L. J., Blair, R., Austin, G., and Steininger, G., supplementary value of banana in institution diets. I. Effect on growth in height and weight, ossification of carpals, and changes in Franzen indices, III, 992.
- Blair, R., Lenning, B., and Scott, M., effect of milk supplement on institutional children. I. Growth in height and weight, III, 1065.
- Brookes, M. H., Blair, R., Austin, G., and Noble, I., supplementary value of banana in institution diets. II. Capillary resistance and reduced ascorbic acid in blood plasma, III, 992.
- Englebrecht, S., Blair, R., Williams, W., and Scott, M., effect of milk supplement on institutional children. III. Progress of dental caries, III, 1065.
- See also Macnair, F.
- Roberts, L. V., achlorhydria in Landry's paralysis, III, 757.
- Roberts, O., and Styles, S. A., apparent connexion between presence of colloids and osmotic pressures of conifer leaves, III, 798.
- Roberts, R. B., Haistad, L. R., Meyer, R. C., and Wang, P., delayed neutron emission which accompanies fission of uranium and thorium, I, 293.
- Meyer, R. C., and Haistad, L. R., droplet fission of uranium and thorium nuclei, I, 234.
- Meyer, R. C., and Wang, P., splitting of uranium and thorium, I, 235.
- See also Rumbaugh, L. H., and Salant, E. O.
- Roberts, R. G., reactions of ammonolysed insulin, III, 681.
- and Horvitz, H. J., effect of ammonolysed foods on the growth of albino rats, III, 282.
- Roberts, R. H., and Struckmeyer, B. E., point of origin of the blossom-inducing stimulus, III, 949.
- Roberts, S. M., and Bailey, J. R., nitrogen compounds from petroleum distillates. XII. Fractional sulphiting of bases and fractional degassing of their hydrogen sulphites, II, 341.
- Robertson, A., Soliman, G., and Owen, E. C., polyterpenoid compounds. I. Betulinic acid from *Cornus florida*, L., II, 484.
- See also Backhouse, T., Foster, R. T., Harland, J. C., Head, F. S. H., Hollis, (Miss) F., Kamthong, B., Kenny, T. S., McGookin, A., O'Donnell, R. W. H., and Reed, F. P.
- Robertson, E. M. See Hain, A. M.
- Robertson, G. J., and Myers, W. H., new acetylated derivatives of amino-sugars, II, 302.
- Myers, W. H., and Tetlow, W. E., "methylepiglucosamine" and 2-amino- α -methylaltroside, II, 101.
- Robertson, G. R., graduated pyknometer, I, 581.
- Robertson, G. W. See Bayliss, L. E.
- Robertson, Jean D. See Beaumont, G. E.
- Robertson, John Douglas, fluid equilibrium of the body and its relation to the eye, III, 472. Chemical equilibrium of interstitial fluids and aqueous humour, III, 751.
- and Barrett, J. F., hæmolysis and mobilisation of red cells after intravenous sodium chloride, III, 648.
- and Williams, P. C., creatinine, sugar, and urea equilibrium between plasma and lymph, aqueous humour, cerebrospinal fluid, and gastric secretion after hypertonic injection of these solutions, III, 375.
- See also Dadds, E. C.
- Robertson, J. M., vector maps and heavy atoms in crystal analysis and the insulin structure, I, 184. Crystal structure and configuration of the isomeric azobenzenes, I, 186.
- and Ubbelohde, A. R., structure and thermal properties associated with some hydrogen bonds in crystals. I. The isotope effect. II. Thermal expansion, I, 306.
- See also Brockway, L. O., and De Lange, J. J.
- Robertson, J. S. M. See Cuthbertson, D. P.
- Robertson, M., reactions *in vitro* of ciliates belonging to the *Glaucocystis* group to antibodies in the sera of rabbits immunised therewith, III, 522. Antigenic properties of ciliates belonging to the *Glaucocystis* group as shown in their response to immune serum, III, 522.
- Robertson, O. H., experimental lobar pneumonia, III, 331.
- and Fox, J. P., relationship of infecting dosage, leucocytic response, bacteraemia, and extent of pulmonary involvement to outcome of experimental lobar pneumonia in the dog, III, 525.
- Robertson, P. W. See Walker, I. K., and White, E. P.
- Robertson, S., and Katz, L. N., referred pain of cardiac origin, III, 123.
- Robertson, W. M. F., and Ashford, G. L., insulin therapy; unusual hypoglycaemic sequels in two psychotic patients, III, 250.
- and Colquhoun, D. B., Meinicke klarungs reaction: development of an improved test, III, 798.
- Robey, M. See Simonnet, H.

- Robeznieks, *I.*, dihydroxymaleic acid and peroxidase, III, 98.
- Robillard, *E.* See Binet, *L.*
- Robinson, *C. F.*, epithelial sheets in tissue culture, III, 347.
- See also Bland, *J. O. W.*
- Robinson, (*Lady*), variable colours of flower petals, III, 952.
- See also Beale, *G. H.*, Lawrence, *W. J. C.*, and Robinson, (*Sir*) *R.*
- Robinson, (*Mrs.*) *A. M.* See Cook, *James W.*, and Haddow, *A.*
- Robinson, *Conmar*, and Garrett, *H. E.*, degree of aggregation of dyes in dilute solution. I. Conductivity measurements, I, 417.
- and Selby, *J. W.*, degree of aggregation of dyes in dilute solution. II. Osmotic pressure measurements, I, 417.
- Robinson, *C. L.*, and Stovall, *W. D.*, clinical bacteriological test for the recognition of *C. welchii* in wounds, III, 428.
- Robinson, *C. S.* See Levy, *S. E.*
- Robinson, *E. S.*, pneumococcus diagnostic serum, III, 331.
- Robinson, *F. A.* See Smith, *E. Lester*.
- Robinson, *G. G.*, mounting thin celloidin sections, I, 539.
- Robinson, *H.* See Antopol, *W.*, and Molitor, *H.*
- Robinson, *H. D.* See Baldwin, *F. M.*
- Robinson, *H. E.*, Gray, *R. E.*, Chesley, *F. F.*, and Crandall, *L. A.*, jun., chondroitinsulphuric acid as a growth factor, III, 1066.
- See also Crandall, *L. A.*, jun.
- Robinson, *H. W.*, Price, *J. W.*, and Hogden, *C. G.*, determination of albumin and globulin in blood serum. II. Separation of fractions by centrifugation with angle centrifuge. III. Precipitation of globulin at 25° by sodium sulphate, III, 12.
- Robinson, *J. R.*, viscosity of colloids. I. Anomalous viscosity of dilute suspensions of rigid anisometric particles, I, 369.
- Shape of tobacco mosaic virus particles in solutions, III, 879.
- Robinson, *K. L.*, determination of small quantities of boron in plant material, III, 733.
- Robinson, *L.*, intravenous paraldehyde narcosis for pneumoencephalography, III, 375.
- Venous blood pressure measurements during syncope caused by a hyperirritable carotid sinus reflex, III, 560.
- See also Osgood, *R.*
- Robinson, *M.*, review of 20 years of breast-feeding in Liverpool, III, 992.
- Robinson, (*Sir*) *R.*, and Robinson, (*Lady*), colloid chemistry of leaf and flower pigments; precursors of anthocyanins, III, 952.
- and Rydon, *H. N.*, synthesis of substances related to the sterols. XXVII. Synthesis of α -norroestron, II, 511.
- and Thompson, *J. M. C.*, experiments on the synthesis of substances related to the sterols. XXVI., II, 73.
- See also Beale, *G. H.*, Bergstrom, *F. W.*, Crowley, *P. G.*, Cruickshank, *J. H.*, Dodds, *E. C.*, Freak, *R. H.*, Fulton, *J. D.*, Holmes, *H. L.*, King, *F. E.*, Klyne, *W.*, Koebner, *A.*, Lawrence, *W. J. C.*, Lin, *K. H.*, Litvan, *F.*, Marriott, *G. J.*, and Price, *J. R.*
- Robinson, *Richard A.*, and Mosettig, *E.*, amino-ketones derived from tetrahydrobenz[β]naphtho[2:3-*d*]furan, II, 336.
- Robinson, *Robert A.*, activity coefficients of alkali halides at 25°, I, 565.
- Relative osmotic coefficients of sodium and potassium chloride in deuterium oxide at 25°, I, 565.
- Activity coefficients of sulphuric acid and lanthanum chloride in aqueous solution at 25°, I, 565.
- Heat content and heat capacity of sodium chloride solutions, I, 566.
- See also Parton, *H. N.*
- Robinson, *R. J.*, and Doan, *D. J.*, improved mercury-scaled micro-absorption tube, I, 493.
- See also Igelsrud, *I.*
- Robinson, *R. R.* See Brown, *D. S.*
- Robinson, *R. W.*, Contratto, *A. W.*, and Levine, *S. A.*, precordial leads, III, 656.
- See also Barker, *M. H.*, Friend, *D. G.*, and Gibson, *J. G.*, jun.
- Robley, See Auger, *P.*
- Robscheit-Robbins, *F. S.*, and Whipple, *G. H.*, infection and intoxication: influence on hemoglobin production in experimental anemia, III, 6.
- See also Whipple, *G. H.*
- Robson, *A. C.* See Clemo, *G. R.*
- Robson, *A. O.* See Earl, *J. C.*
- Robson, *G. B.*, and Gray, *H.*, protamine insulin, III, 262.
- See also Cutting, *W. C.*
- Robson, *J. M.*, antagonism of action of triphenylethylene, III, 146.
- Gonadotropic hormone and luteal function, III, 268.
- Mechanism of estrus inhibition in the mouse during pregnancy, III, 381.
- Maintenance of pregnancy in hypophysectomized rabbit by administration of estrin, III, 383.
- Absence of antagonism of estradiol by progesterone or testosterone, III, 755.
- Effects of progesterone and deoxycorticosterone acetate, III, 980.
- and Bonser, *G. M.*, production of mammary carcinomas in mice of a susceptible strain by the synthetic estrogen triphenylethylene, III, 281.
- See also Dawson, *R. F.*, Eggleston, *P.*, and MacDonald, *A. M.*
- Robson, *K.*, and Todd, *J. W.*, fibrocystic disease of bone, III, 377.
- Robson, *W.* See Miller, *E. J.*
- Roby, *C.*, Last, *J. H.*, and Pfeiffer, *C.*, watermelon diuresis, III, 487.
- Robyn, *G.*, acetone-soluble lipins in serological diagnosis of syphilis by flocculation reaction A.B.F., III, 431.
- Rocco, *M. L.*, purine metabolism in insects, III, 172.
- Roche e Silva, *M.*, liberation of histamine by perfusion of guinea-pig lung with trypsin, III, 614.
- Effect of trypsin on the guinea-pig uterus, III, 614.
- Effect of trypsin on isolated smooth muscle of the guinea-pig, III, 614.
- and Bier, *O. G.*, determination of histamine in hemorrhagic lesions in rabbits with Schwartzman's phenomenon, III, 394.
- Factor responsible for positive chemotaxis of leucocytes in inflammation, III, 548.
- See also Bier, *O.*
- Rochat, *J.* See Duboux, *M.*
- Roche, *A.*, and Mourgue, *M.*, strontium rickets and demineralisation of the long bones in adult rats, III, 769.
- Roche, *E. H.*, and Caughey, *J. E.*, influenzal meningitis treated with M. & B. 693, III, 1082.
- Roche, *H.*, tomography, III, 23.
- Roche, *J.*, protides; [proteins], III, 171.
- and Bullinger, *E.*, phosphatases of the osseous system of fishes (solachii and teleostei), III, 325.
- Phosphatase and development of the teeth, III, 424.
- Ossification. VII. Phosphatase of the bones, teeth, and skin of bony and cartilaginous fish, III, 488.
- Activation and inhibition of phosphatase system of blood cells, III, 893.
- and Chouaiech, *M.*, mol. wt., osmotic pressure, and physiological rôle of the plasma erythrocrucorins (invertebrate hemoglobin), III, 648.
- and Collet, *J.*, phosphatase activity of teeth and skin of the lamprey; comparative biochemistry of ossification, III, 941.
- and Derrien, *Y.*, solubility of the hemerythrin of *Sipunculus* in presence of neutral salts, III, 937.
- Solubility, state of dispersion, and specificity of various hemocyanins, III, 937.
- Derrien, *Y.*, and Chouaiech, *M.*, precipitation of serum-proteins by ammonium sulphate; sera of marine vertebrates (reptiles and fishes of various orders), III, 817.
- Derrien, *Y.*, and Moutte, *M.*, sodium sulphate as precipitant for serum-globulin, III, 817.
- and Donnat, *L.*, stability of combination of ham and globin and denaturation of hemoglobin, III, 891.
- and Filippi, *A.*, parathyroid hormone and phosphatase content of bone, III, 137.
- Ossification. V. Increase in phosphatase activity of the skeleton following fracture of a bone, III, 155.
- Augmentation of phosphatase activity following bone fracture, III, 278.
- and Mourgue, *M.*, modification in skeletal composition following fracture of a long bone, III, 394.
- Ossification. VI. General changes in the composition of long bones after experimental fracture, III, 488.
- Effect of parathormone and vitamin-D, on experimental fractures, III, 769.
- Roche, *W. J.*, and McSweeney, *C. J.*, M. & B. 693 in meningococcal meningitis, III, 928.
- Rochester, *G. D.*, band spectrum of lead fluoride (PbF). II., I, 7.
- Absorption spectrum of aluminium fluoride (AlF), I, 548.
- See also Howell, *H. G.*
- Rochlin, *G.* See Fabrikant, *V.*
- Rochow, *E. G.* See Liebhafsky, *H. A.*
- Rock, *H. J.* See Miller, *E.*
- Rock, *J.*, Reboul, *J.*, and Snodgrass, *J. M.*, electrical changes associated with human ovulation, III, 583.
- Rockwell, *H.*, Evans, *F. G.*, and Pheasant, *H. C.*, comparative morphology of the vertebral spinal column; its form as related to function, III, 887.
- Roda, *E.* See Oberdisse, *K.*
- Roddard, *S.* See Katz, *L. N.*
- Rodden, *C. J.*, handling of hygroscopic substances in the micro-determination of carbon and hydrogen, II, 462.
- See also Smith, *E. R.*
- Rodebush, *W. H.*, and Buswell, *A. M.*, association through hydrogen, I, 183.
- See also Buswell, *A. M.*
- Roden, *P. von.* See Werle, *E.*
- Rodenwaldt, *E.*, adaptation to climatic changes, III, 192.

- Rodewald, *W.*, melanophoric hormone in mice and rats affected with malignant tumours, III, 47. Changes in the melanophoric hormone content of the pituitary in carcinoma cases, III, 47. Anti-gonadotropic action of carcinoma serum, III, 474. Pituitary and cancer, III, 489.
See also Hinsberg, *K.*
- Rodgers, *H. W.*, gastroscopy, III, 592.
- Rodinó, *D.*, blood-alcohol produced during fasting in pre- and post-operative cases of gastro-duodenal ulcer, III, 841.
- Rodionov, *V. M.*, and Fedorova, *A. M.*, mono- and di-methoxyanthranilic acids and their derivatives, II, 263. Reaction between dimethylaniline and opianic acid, II, 323.
- Rodolfo-Masera, *T.*, urinary ammonia, alkali reserve, and alveolar carbon dioxide in adenoids, III, 898.
See also Gatteschi, *G.*
- Rodrigues Cardosa, *M.* See Moniz de Bettencourt, *J.*
- Rodríguez, *F.* See Lipschütz, *A.*
- Rodríguez, *J. S.* See Diaz, *C. J.*
- Rodríguez-Molina, *R.* See Rodríguez-Ollerós, *R.*
- Rodríguez-Ollerós, *R.*, and Rodríguez-Molina, *R.*, the Jacobson method for assay of [antipernicious anæmia] liver extracts, III, 7.
- Roe, *A. S.* See Hurd, *C. D.*
- Roe, (*Miss*) *E. M. F.* See Cook, *James W.*
- Roe, *J. H.*, and Hall, *J. M.*, vitamin-C content of human urine and its determination through the 2:4-dinitrophenylhydrazine derivative of dehydroascorbic acid, III, 604.
- Roeder, *J.*, distribution of iodine in German salt deposits; reasons for the presence and absence of iodine in different horizons of the Zechstein formation, and in petroleum waters, I, 107.
- Roeder, *K. D.*, and Roeder, *S.*, electrical activity in isolated ventral nerve cord of cockroach. I. Action of pilocarpine, nicotine, eserine, and acetylcholine, III, 1039.
- Roeder, *S.* See Roeder, *K. D.*
- Roedig, *A.* See Fischer, *F. G.*
- Rödiger, *E.* See Lock, *G.*
- Röed, *K.* See Enders, *C.*
- Roehl, *E. J.*, crystalline lead orthophosphate, I, 531.
- Röhlich, *K.*, cytology of prostatic secretion, III, 51.
- Roelsen, *E.*, so-called traumatic thrombosis of the axillary and subclavian veins, III, 551. Composition of alveolar air investigated by fractional sampling, III, 563.
- Römcke, *G.*, and Vogt, *E.*, pneumonia treated with M. & B. 693, III, 1081.
- Roemheld, *L.*, influence of diet on cardiac output, III, 456.
- Roemmele, *O.*, reabsorption of fat in mesenteric lymph nodes of swine, III, 484.
- Röntgen, *P.*, and Winterhager, *H.*, solubility of hydrogen in aluminium and magnesium, I, 365.
- Roepeke, *R. R.*, and Baldes, *E. J.*, thermo-electric measurement of vapour pressure, I, 42.
- Roesler, *H.* See Durant, *T. M.*
- Rösle, *R.*, and Zahler, *H.*, changes in testis and prostate after administration of testicular preparations, III, 687.
- Rossler, *F.*, red continuous spectrum from the mercury high-pressure discharge, I, 440.
and Schonherr, *F.*, radiation of wavelength 2537 Å. in the low-pressure mercury discharge, I, 112.
See also Krefitz, *H.*
- Rössler, *H.* See Harms, *H.*
- Roessler, *Hubert.* See Zintl, *E.*
- Rossler, *R.* See Skita, *A.*
- Rotger, *H.* See Bennowitz, *K.*
- Rotiger, *G.* See Zetzsche, *F.*
- Roffo, *A. H.*, ulcer and tumour formation in the intestinal tract after feeding with irradiated cholesterol, III, 280. Carcinogenic components of tobacco tar, III, 764. Carcinogenic tar from coffee, III, 1062.
- Roganov, *O. P.* See Kizel, *A. R.*
- Rogatz, *J. L.*, pleomorphic cell lymphosarcoma of thymus, III, 908. Microsedimentation of erythrocytes in infants and children, III, 1026.
and Picker, *M.*, catalepsy in infant aged 22 months, III, 970.
- Roger, *R.*, stereochemical structure. IX. Stereochemical relationship of the α - and β -forms of substituted hydrobenzoin; ethylhydrobenzoin (β -form), II, 111.
- Rogers, *A. F.*, diadochite, a mineraloid from the New Idria mine, San Benito Co., California, I, 344.
and Cahn, *L.*, quartz with pinacoid faces from Nathrop, Chaffee Co., Colorado, I, 344.
- Rogers, *B. G.* See Henze, *H. R.*
- Rogers, *C. H.*, growth of *Phymatotrichum omnivorum* in solutions with varying amounts of mineral elements, III, 1098.
See also Goldner, *K. J.*
- Rogers, *D. A.* See Lundy, *J. S.*
- Rogers, *E. B.*, sensitisation reaction to sulphanilamide, III, 302.
- Rogers, *F. T., jun.*, stopping power of hydrogen at very low energies, I, 297.
and Rogers, (*Mrs.*) *M. M.*, binding energy of the deuteron, I, 171, 176.
- Rogers, *H. E.* See Adams, *H. E.*, and Smith, *J. W.*
- Rogers, *H. J.* See Davis, *J. G.*
- Rogers, *J.* See Owen, *E. A.*
- Rogers, *J. C. T.* See Gillespie, *J. B.*
- Rogers, *J. S.*, absorption of γ -rays by barium sulphate, gypsum, water, and flesh, I, 115.
- Rogers, *K. B.* See Maclean, *I. H.*
- Rogers, *L.*, prontosil in sprue, III, 81.
- Rogers, *L. H.*, spectrographic micro-determination of copper, I, 218.
and Williams, *Dudley*, infra-red absorption spectra of sugars and furans, I, 8.
- Rogers, (*Mrs.*) *M. M.* See Rogers, *F. T., jun.*
- Rogers, *M. T.* See Helmholtz, *L.*, and Shipley, *J. W.*
- Rogers, *W. S.*, root studies. VII. Survey of literature on root growth with special reference to hardy fruit plants, III, 730.
- Rogge, *G.* See Thilo, *E.*
- Roggenbau, *C. H.*, insulin shock treatment of schizophrenia, III, 970.
- Roginski, *S. Z.*, mechanism of catalytic oxidation by molecular oxygen at low temperatures, I, 151. Kinetics of topochemical reactions, I, 423. Kinetics of crystal growth, I, 616.
- Rogoff, *J. M.*, and Marcus, *E.*, supposed role of the adrenals in hypertension, III, 22.
- Nixon, *E. N.*, and Stewart, *G. N.*, adrenals in experimental hypertension, III, 1032.
- Rogovin, *Z.*, and Ivanova, *V.*, properties of solutions of cellulose esters. V. Influence of the form of the molecules on the integral heat of solution, I, 258.
See also Kargin, *V.*
- Rogowski, *P.* See Fischer, *E.*
- Rogowski, *W.*, theory of [electrical] breakdown, I, 302.
- Rogozinski, *A.* See Goldstein, *L.*
- Rohde, *G.*, significance of potassium in chlorophyll production in plants, III, 731.
- Rohde, *W.*, thermo-electric potential of the element metal-semiconductor-metal. III. Variation with temperature difference of thermo-electric power of cuprous oxide, I, 132.
- Rohmann, *C.*, and Friedrich, *K.*, relationships between constitution and action of derivatives of *p*-aminophenol, II, 418.
- Rohmer, *R.*, nickel sulphate and cobalt sulphate, I, 420. Dehydration of manganous sulphate by the aqueous method; intermediate hydrates, I, 523.
- Rohner, *F.*, and Roulet, *F.*, synthesis of flavins by tubercle bacilli, III, 528.
- Rohny, *B.* See Meduna, *L.*
- Rohr, *K.*, European spruce, III, 161.
- Rohracher, *H.*, shape of cerebral potential curves, III, 571.
- Rohrmann, *A.* See Eyer, *H.*
- Rohrmann, *E.* See Marker, *R. E.*, Whitmore, *F. C.*, and Williams, *Roger J.*
- Roiter, *V. A.*, Jusa, *V. A.*, and Polujan, *E. S.*, electrochemical polarisation of metal electrodes. I. Mechanism of polarisation of the iron electrode. II. Polarisation of zinc electrode, I, 614.
- Rojas, *P.*, influence of curare and stimulation on structure of [skeletal muscle] end-plate, III, 565.
and Manfredi, *F. J.*, histophysiology of parathyroid grafts, III, 255.
and Resta, *L. S.*, Golgi apparatus and vacuola in striped muscle fibres, III, 25. Muscle-glycogen, III, 25. Histophysiology of the chondrioma in striped muscle, III, 644.
- Rokitskaja, *M. S.* See Melnikov, *N. N.*
- Roll, *H. C.* See Rattner, *H.*
- Roll, *R. M.* See Wintrobe, *M. M.*
- Rollé, *R.* See Valette, *G.*
- Rollefson, *G. K.*, and Burton, *M.*, competition of predissociation process in the photolysis of polyatomic molecules, I, 89.
and Grahame, *D. C.*, effect of temperature on the predissociation of photo-activated acetaldehyde molecules, I, 620.
See also Etzler, *D. H.*, and Stoughton, *R. W.*
- Rollefson, *R.*, and Havens, *R. J.*, refractive index of methane in the infra-red, I, 303.
- Roller, *M.*, treatment of aphthous stomatitis, III, 1092.
- Roller, *O.* See Reuss, *L.*
- Roller, *P. S.*, plastic flow of dispersions and a new approach to study of plasticity, I, 319.
and Ervin, *G., jun.*, turbidimetric determination of carbon dioxide, I, 277.
- Rollet, *J.* See Policard, *A.*

- Rollier, M. A., and Arreghini, E., structure of copper cyanide complexes. I. Structure of the double copper cobalt and copper chromium cyanides, I, 600.
- Rollin, B. V., self-diffusion in copper, I, 173.
- and Simon, Franz, "film" phenomenon of liquid helium II, I, 190.
- See also Cooke, A. H.
- Rollins, D. B., and Calderwood, H. N., method of Garelli and Racciu for the preparation of piperazine; a criticism, II, 37.
- Rollwagen, W., physical phenomena of the arc discharge and their importance in spectro-analytical methods of investigation, I, 533.
- Roman, W., determination with the photo-electric colorimeter of nitrogen and phosphorus in enzymic digests, III, 735.
- See also King, E. J.
- Romaniello, G., reticulo-histocytic system and placental barrier, III, 1023.
- Romaniuk, N. M. See Chvojnickaja, M. A.
- Romanoff, A., effect of testicular extract (Reynal's spreading factors) on human skin, III, 191. Sulphur dioxide poisoning as a cause of asthma, III, 618.
- Romanoff, A. L., artificial incubation of game birds. III. Effect of air movement on incubation. IV. Interrelation of temperature, humidity, and air movement, III, 643.
- Romanova, K. See Roskin, G.
- Romborg, G. H., experimental transplantation of the ovaries; autotransplants of dog ovary into omentum, III, 56.
- Rombock, L. See Kienitz, H.
- Romenski, N. M., influence of phosphorus content of biological materials on determination of their total ash, III, 344.
- Romenski, N. V., chemical characteristics of grains, III, 342.
- Romeo, F., biochemistry of hypoglycæmic shock. I. Blood-, plasma-, and erythrocyte-chloride, III, 1050.
- Romero, L. F. See Balado, M.
- Romijn, C., and Roos, J., air space of hen's egg and changes during period of incubation, III, 146.
- Rommel, O. See Schmid, G.
- Rompe, R., and Schulz, P., varieties of mercury high-pressure column, I, 440.
- Schulz, P., and Thourer, W., behaviour of the continuous radiation from mercury at high densities, I, 290.
- See also Riewe, K. H.
- Rona, E. See Foyn, E.
- Ronæss, E. See Stokland, K.
- Ronayette, M. See Mathieu, J. P.
- Ronayroux, M. See Mousseron, M.
- Roncallo, E. See Michetti, G.
- Roncato, A., Kratky-Giacomello theory of the structure of choleic acids; conception of linear co-ordination, III, 65.
- Ronchese, F., transfusion syphilis, III, 892.
- and Chace, R. R., patterned alopecia about the calves and its apparent lack of significance, III, 1061.
- Rondoni, P., protein synthesis in physiological and pathological conditions, III, 171.
- Ronse, M., pure culture of unicellular algae, III, 1011.
- Ronstrom, G. N., vascular supply of the human kidney, III, 274.
- Ronzoni, E. See Barker, P. S.
- Roofe, P. G., blood vascular system of the hypophysis of *Amblystoma tigrinum*, III, 44.
- Rook, A. F., and Dawson, D. J., hypotension and flying, III, 123.
- Rooks, R., bacterial filtering efficiency of the human nose, III, 898.
- Rooksby, H. P. See Jenkins, H. G.
- Roome, N. W., effects of intra-arterial epinephrine on blood flow in an extremity, III, 44. Aetiology of shock, III, 238. Visualisation of the adrenal glands by air injection, III, 580.
- Roos, C. J., urobilinogen in plasma, III, 230.
- Roos, J., physiology of playing the flute. II. Flageolet tones, III, 460.
- See also Romijn, C.
- Roos, J. B. See Boeseken, J.
- Roosen-Runge, C. See Windaus, A.
- Root, C. W. See Hess, W. N.
- Root, R. N. See Corr, P.
- Root, R. W., Irving, L., and Black, E. C., effect of hemolysis on combination of oxygen with the blood of marine fishes, III, 823.
- Roovers, J. C. P. A., calcinosis universalis, III, 856.
- Roper, E. E., instability of liquid isobutene, II, 1.
- Ropes, M. W., Bennett, G. A., and Bauer, W., origin and nature of normal synovial fluid, III, 651.
- Rosa, E., band spectra of the copper halides, I, 352.
- Rosahn, P. D. See Kemp, J. E.
- Rosanoff, A. J., present status of fever therapy in prevention and treatment of neurosyphilis, III, 418.
- Rosanoff, H. See Cornil, L.
- Rosdahl, K. G. See Agren, G.
- Rose, A., thermal dissociation of zinc carbonate, I, 264, 498.
- Rose, B., sex difference of histamine content of blood of the rat, III, 233.
- and Browne, J. S. L., disappearance of intravenously injected histamine, III, 311.
- Rose, C. L. See Chen, K. K., and Stuart, E. H.
- Rose, E. See Edeiken, J.
- Rose, E. J. See Schultz, M. P.
- Rose, F. C. See Randall, R. H.
- Rose, F. W., jun. See White, J. D.
- Rose, M., experimental inversion of geotropism of principal root in the cultivated pea, III, 1018.
- and Berthelot, J., production of experimental tumours in higher plants by inoculation with cobra (*Naja tripudians*) venom, III, 732.
- and Hamon, M., effect of œstradiol benzoate injected in oily solution on roots of cultivated pea, III, 883.
- Effect of synthetic sex hormones on gasteropod mollusc, III, 981.
- Rose, M. E., multiple scattering and stopping of electrons, I, 53.
- and Bethe, H. A., absence of polarisation in electron scattering, I, 168.
- Rose, W. C., and Epstein, S. H., dietary indispensability of valine, III, 492.
- and Rice, E. E., utilisation of sulphur-containing compounds for growth, III, 1066.
- Roseberry, F. See Rittenberg, D.
- Rosegger, H., Weltmann [coagulation] reaction, III, 355.
- Roseman, R. See Katsoff, S.
- Rosen, B., molecular spectrum of selenium, I, 166.
- See also Moureu, H.
- Rosen, B. D. See Iddles, H. A.
- Rosen, C. See Evelyn, K. A.
- Rosen, M. See Jahiel, R.
- Rosen, N., field theory of elementary particles, I, 176.
- Rosen, R. See Sparks, W. J.
- Rosenak, S., procaine injection treatment of herpes zoster, III, 87.
- Rosenbaum, E. J., and Ashford, T. A., Raman spectrum of antimony trimethyl, I, 450.
- Grosse, A. V., and Jacobson, H. F., Raman spectra of the hexanes and heptanes, I, 241.
- See also Freed, S.
- Rosenbaum, F. F. See Kline, E. M.
- Rosenbaum, M., and Merritt, H. H., Korsakoff's syndrome: clinical study of alcoholic form with special regard to prognosis, III, 765.
- Rosenberg, A. See Haenny, C.
- Rosenberg, E. F., brain in malignant hypertension, III, 658. Insulin hypoglycæmia. II. Behaviour of blood gases in relation to hypoglycæmic state. III. Glycorrhachia and hypoglycæmia, III, 681. Hypoglycæmia induced by insulin; blood concentration in hypoglycæmia, III, 818.
- Rosenberg, L. See Etkin, W.
- Rosenberg, P., design of an accurate McLeod gauge, I, 342. Collision cross-section of K atoms and K₂ molecules in gases, I, 442.
- Rosenberg, S. J. See Langworthy, O. R.
- Rosenberg, Z. See Hadáček, J.
- Rosenblueth, A., and Cannon, W. B., effects of preganglionic denervation on the superior cervical ganglion, III, 666.
- and Reboul, J., blocking and deblocking effects of alternating currents on nerve, III, 664.
- and Simeone, F. A., responses of the superior cervical ganglion to single and repetitive activation, III, 35.
- Action of eserine or prostigmine on the superior cervical ganglion, III, 35.
- See also Reboul, J.
- Rosenblum, C., interaction between methylene radicals and hydrogen, II, 6.
- Rosenblum, S. See Haissinsky, M.
- Rosenbluth, M. See Goldstein, D.
- Rosenbohm, A., tryptophan content of rat organs and tumours, III, 158.
- See also Lang, A.
- Rosenbohm, E., electrical resistance and thermo-e.m.f. of the two allotropic modifications of thallium, I, 309.
- See also Jaeger, F. M.
- Rosenfeld, B. See Weizmann, C.
- Rosenfeld, H. See Peck, S. M.
- Rosenfeld, L., and Fine, J., effect of breathing 95% oxygen on intraluminal pressure occasioned by gaseous distension of obstructed small intestine, III, 690.
- See also Møller, C.
- Rosenfeld, Max, autonomic nervous system and psychological disturbances, III, 570.
- Rosenfeld, Morris, photo-electric photometer for colorimetric chemical analysis, I, 491.
- See also Snyder, F. F.
- Rosenfeld, W. See Lauber, H. J.
- Rosenhauer, E. See Pummerer, R.
- Rosenhead, L. See Corkill, A. J.

- Rosenkranz, G. See Ruzicka, L.
 Rosenkranz, S., action of adrenaline after oral administration, III, 44.
 Rosenmund, K. W. See Buth, W.
 Rosenthal, G., infra-red absorption of rare-earth ions, I, 509.
 Rosenthal, H., action of dolantin on wound pain, III, 1086.
 Rosenthal, H. G. See Saechtling, H.
 Rosenthal, N., course and treatment of thrombopenic purpura, III, 549.
 and Bassen, F. A., course of polycythæmia, III, 350.
 See also Yaguda, A.
 Rosenthal, S. M., Bauer, Hugo, and Elvove, E., antibacterial action of some aromatic arsenic, sulphur, and nitro-compounds, III, 1000.
 Rosenthal, T. See Chargin, L.
 Rosenthaler, L., analytical use of cacoethelin, I, 42.
 Rosenwald, R. H. See Koelsch, C. F.
 Rosenzweig, S. See Waldbott, G. L.
 Roseveare, W. E. See Hirschfelder, J. O.
 Rosher, R. See Bradsher, C. K.
 Rosin, J. A., autonomic system in shock, III, 363.
 Rosing, V. S. See Elovitz, S. I.
 Roskam, J., spontaneous hæmostasis, III, 353. Coagulation time and its modification by hæmostatic drugs, III, 815.
 See also Bacq, Z. M.
 Roskin, G., and Romanova, K., treatment of experimentally induced cancer with protozoan endotoxins, III, 699.
 Rosmann, F. See Wirth, D.
 Rosner, L., and Bellows, J., passage of sorbitol from the blood into the aqueous humour and cerebrospinal fluid, III, 818.
 Rosow, H. M. See Jewett, S. P.
 Ross, A. See Korenchevsky, V.
 Ross, A. F., and Stanley, W. M., partial reactivation of formalised tobacco mosaic virus, III, 208. Sulphur and phosphorus contents of tobacco mosaic virus, III, 530.
 Ross, A. O. F., granuloma venereum treated with M. & B. 693, III, 306.
 Ross, A. T., peripheral neuritis: allergy to honeybee stings, III, 901.
 Ross, C. S., and Stephenson, L. W., calcareous shells replaced by beidellite, I, 541.
 See also Hendricks, S. B.
 Ross, C. W., and Tonks, E. L., determination of glucose tolerance, III, 300.
 Ross, D. A., and Schwab, R. S., cortical alpha rhythm in thyroid disorders, III, 902.
 Ross, E., effects of sodium cyanide and methylene-blue on oxygen consumption by *Nitella clavata*, III, 108.
 Ross, E. J. See Greenbaum, A.
 Ross, F. See Schopf, C.
 Ross, I. S., pulmonary epithelium and proliferative reactions in the lungs, III, 462.
 Ross, J. R. See Summerfeldt, P.
 Ross, J. W., correlation between blood pressure and nembutal dosage in the toxæmias of late pregnancy, III, 86.
 Ross, M., mental retardation associated with congenital heart disease, III, 360.
 Ross, M. A. See Defries, R. D., and Korenchevsky, V.
 Ross, R. W., acquired tolerance of pneumococcus to M. & B. 693, III, 774.
 Ross, W. E. See Fuson, R. C.
 Ross, W. F., hæm-globin linking of hæmoglobin. I. Course of pancreatic digestion of oxy- and carbon monoxide-hæmoglobin. II. Mol. wt. of product from carbon monoxide-hæmoglobin, III, 229. Phyllochromogen of protoporphyrin and pyridine, III, 343.
 Rosset, W., action of adrenal cortex tumour extracts on oestrus of rats, III, 911.
 Rossi, A., fission of α -benzylacetacetic acid in the kidney, III, 501. Activation of arginase, III, 517.
 and Ruffo, A., inactivation and reactivation of arginase, III, 786. Lyso- and desmo-arginase, III, 786.
 Rossi, B., further evidence for radioactive decay of mesotrons, I, 55.
 Rossi, C. See Fierz-David, H. E.
 Rossi, F., nerve supply of the peritoneum and question of sensibility of internal organs, III, 245.
 Rossi, G. (Messina), and Ragno, M., adsorption by an insoluble substance which is formed in the solution of the adsorbent, I, 466. Organomercury compounds of vanillin, II, 397.
 Rossi, G. (Pavia). See Levi, G. R.
 Rossi, Gilberto, and Di Giorgio, A. M., ocular reactions preceding postural changes of the head, III, 571.
 Rossi, P., blood-urea in cattle during hæmorrhage, III, 653. Urea content of cerebrospinal fluid and blood of suckling calves, III, 962.
 and Daubard, urea content of saliva and serum of horse after injection of arceoline, III, 929. Urea content of serum and saliva after pilocarpine, III, 1002.
 Rossier, P. H., hyperventilation tetany, III, 565. Carotid sinus syndrome, III, 745.
 Rossini, F. D., heat and free energy of formation of water and of carbon monoxide, I, 420.
 and Jessup, R. S., heat and free energy of formation of carbon dioxide, and of the transition between graphite and diamond, I, 27.
 See also Knowlton, J. W.
 Rossiter, R. J. See Peters, R. A.
 Rost, B. See Brintzinger, H.
 Rost, E., toxicology of the fluorides, III, 190.
 Rost, G. A., food tests in allergic skin diseases with Vaughan's leucopenic index, III, 867.
 Rostenberg, A., jun., and Sulzberger, M. B., list of substances for patch testing and concentrations to be employed, III, 1006.
 See also Landsteiner, K.
 Róza, P. See Schulek, E.
 Rotblat, J., emission of neutrons accompanying the fission of uranium nuclei, I, 443.
 Roth, F., direct or indirect blood transfusion, III, 649.
 Roth, G. B. See Klotz, J.
 Roth, G. M., and Ryneerson, E. H., use of histamine and histaminase in treatment of allergic reaction to insulin, III, 975.
 Williams, M. M. D., and Sheard, C., changes in skin temperatures of extremities produced by changes in posture, III, 238.
 See also Horton, B. T.
 Roth, H., determination of free and combined tryptophan in plants, III, 638.
 Roth, O., pathogenesis and treatment [with torantyl] of bronchitis fibrinosa, III, 306.
 Roth, P., and Buckingham, P. E., criteria of a dependable basal metabolism report, III, 404.
 Roth, W. A., specific heat of water (H₂O) between 0° and 100°, I, 14. Calorimetry and thermochemistry, I, 323. [Heat of combustion of succinic acid], I, 524.
 and Lamprecht, A. E., heat of combustion of standard substances for calibration of calorimeters, I, 265.
 Rothbard, S., and Herman, J. R., attempts to propagate fowl tumours produced by benzpyrene and by virus, III, 989.
 Rothberger, C. J., and Sachs, A., rhythmicity and automatism in mammalian left auricle, III, 895.
 Rothen, A. See Levene, P. A.
 Rothenberger, M. See Plotz, M.
 Rothlin, E., pharmacology of strophanthus therapy, with reference to *k*-strophanthoside, III, 712.
 Rothman, S. C. See Flinn, R. H.
 Rothney, J. W. M. See Dearborn, W. F.
 Rothschild, (Lord), effect of phloridzin on metabolism of cytolyzing sea-urchin eggs, III, 1053.
 See also Laser, H.
 Rothschild, E. See Dam, H.
 Rothschild, F., and Staub, H., biological standardisation of digitalis infusion, digitalis extract, and injectable digitalis, in cat, III, 862.
 Rothschild, G., and Cera, B., simultaneous absorption of proteins and sugar in a Vella intestinal loop, III, 270.
 Rothschild, H., pectin substances. III. Pectin constituents as antigens. IV. Separation of pectin enzymes, III, 439.
 Rothschild, H. B., treatment of symptomatic vomiting in children, III, 312.
 Rotinjan, A. L., kinetics of redox potentials. I.—III., I, 613.
 Rotmann, E., rôle of inducing and reacting tissue in development of amphibian lens, III, 751.
 Rottenbach, E., density of the pure potash-felspar constituent in microcline, and its general chemical composition, I, 436.
 Rotter, H., influence of dichlorophenol-indophenol on human cancer tissue, III, 699.
 Rotter, W. See Picado, C.
 Rottgardt, J., investigations with detectors in the region of short electric waves, I, 44.
 Rottier, P. B. See Milatz, J. M. W.
 Rottino, A., medial degeneration of the aorta; a study of 210 routine autopsy specimens by a serial block method, III, 965.
 and McGrath, J. F., masculinising tumour of the ovary, III, 685.
 Rottmann, A., familial occurrence of progressive muscle dystrophy, III, 27. Treatment of neuro-syphilis with cobra toxin, III, 180.
 Rottshafer, G. See Bean, J. W.
 Rouault, M., Fourier analysis of electron diffraction [intensities] for free molecules, I, 359.
 Rouault, (Mme.) M., *K* absorption discontinuities of the elements lanthanum (57), cerium (58), praseodymium (59), neodymium (60), and samarium (62), I, 543.
 Rouard, P., very thin sheets of platinum, I, 307. Phase increment of 2π in reflexion from metals, I, 360.

- Roubaud-Valette, J., equations capable of representing a photon, I, 118.
- Rougeot, L., atomic number and physical properties of elements, I, 362.
- Roughton, F. J. W., and Booth, V. H., catalytic effect of buffers on reaction $\text{CO}_2 + \text{H}_2\text{O} \rightleftharpoons \text{H}_2\text{CO}_3$, I, 33.
- Roulet, F. See Rohner, F.
- Roulston, K. I. See Ditchburn, R. W.
- Rourke, M. See Stewart, J. D.
- Rous, P., and Kidd, J. G., comparison of virus-induced rabbit tumours with the tumours of unknown cause elicited by tarring, III, 599.
- See also Kidd, J. G.
- Rousseau, (Mlle.) G. See Kahane, E.
- Rousseaux, R. See Vérain, M.
- Roussel, G. See Gruzewska, Z.
- Rousselot, L. M., and Thompson, W. P., experimental production of congestive splenomegaly, III, 1030.
- Routh, J. I., decomposition of cystine in aqueous solution, II, 11. Decomposition of cysteine in aqueous solution, II, 496.
- Routier, D., the vectogram, III, 16.
- and Gerbeaux, J., electrocardiogram in hypertension, III, 744.
- See also Laubry, C., and Pamourgas, B.
- Rouvé, A. See Stoll, M.
- Rouvillois, J. See Muraour, H.
- Roux, H. See Chevallier, A.
- Rouyer, M., and Servigne, M., microbicidal action of ultra-violet rays, III, 96.
- See also Lacassagne, A.
- Rouzaud, J. See Baisset, A.
- Rovenstine, E. A., antidotal action of picrotoxin in acute intoxication by the barbiturates, III, 88.
- See also Burstein, C. L., Cullen, S. C., Lester, C. W., and Smith, H. W.
- Rovida, E. See De Caro, L.
- Rovira, S. See Polfray, L.
- Rovner, L. See Weinstein, M. L.
- Row, R., experimental observations on human and rat leprosy and their significance in pathogenesis and treatment of the disease, III, 429.
- Rowan, J. See Ruysen, R. G.
- Rowe, A. H., pine pollen allergy, III, 936.
- and Fong, J., specificity of Gramineae pollens as evidenced by precipitin reactions, III, 1090.
- See also Ratner, B.
- Rowe, L. W., strong and variable action of U.S.P. XI digitalis standard, III, 85.
- Rowe, T. D., isolation and identification of an ether-soluble alkaloid in *Coptis occidentalis*, III, 952.
- Rowinsky, P. See Dorello, F.
- Rowinski, P. See Poratti, R.
- Rowland, E. N., and Wilkinson, J. F., significance and determination of blood-vitamin-B₁₂, III, 74.
- Rowland, G. P., photo-electric colorimetry; optical study of permanganate ion and of the chromium-diphenyl-carbazide system, I, 578.
- Rowlands, I. W., selective neutralisation of the luteinising activity of gonadotropic extracts of pituitary by anti-sera, III, 48.
- and Young, F. G., capacity of pituitary preparations containing thyrotropic hormone to induce formation of antisera, III, 577.
- See also Noble, R. L.
- Rowlands, R. A., and Vaizey, J. M., primary thrombocythæmia, III, 117.
- Rowley, H. H., [laboratory] experiment on low-pressure technique, I, 583.
- and Olson, F. V., physical studies of non-aqueous solvates. III. Vapour pressure of zinc bromide-diethyl ether solutions, I, 523.
- Rowntree, L. G., Steinberg, A., Einhorn, N. H., and Schaffer, N. K., iodine-reducing substances of thymus extract, III, 39.
- See also Einhorn, N. H., and Schaffer, N. K.
- Roy, A. C., lipolytic activity of cobra and Russell's viper venoms, III, 92.
- and Chopra, R. N., biochemical characteristics of snake venom, III, 90.
- See also Chopra, R. N.
- Roy, B., Raman spectra of co-ordination compounds, I, 355.
- Roy, B. K. D. See Vardon, A. C.
- Roy, L., electric actions in a system of isotropic bodies, I, 9.
- Roy, (Mme.) M. See Boutaric, A., and Brocq-Rousseau, D.
- Roy, N. C. See Ahmad, B.
- Roy, N. N. See Ghosh, B. N.
- Roy, S. C. See Lal, R. B.
- Roy, S. K., Sharma, N. L., and Chattopadhyay, G. C., mica-pegmatites of Kodarma, India, I, 496.
- Roy, W. R., and Hughes, A. E., application of Scales' method to determination of sugar in plant juices and tissues, III, 216.
- Royal Anthropological Institute, Swanscombe skull, III, 544.
- Royer, L., existence of pleochroic halos in gneisses from the Algerian Massif, and its geological consequences, I, 226. Mineralogical nature of North African minerals; X-ray study, I, 436.
- Royle, H. See Pepper, J. K. W.
- Rozefeld, L. E., and Goldman, S., phylogenetic aspects of oxidation processes. I. and II., III, 97, 156.
- Rozengard, L. I. See Sabinina, L. E.
- Rozental, S. See Møller, C.
- Rozin, S. See Zondek, B.
- Rozov, V. N. See Pletenev, S. A.
- Rozsival, M. See Dolejšek, V.
- Rozynek, M., formation of fibres in Jensen sarcoma cultivated *in vitro*, III, 763.
- Rubaschko, Z. J. See Pigulevski, G. V.
- Rubel, L. N., and Kardo-Suisoeva, E. K., carbohydrate balance of *A. niger* in biochemical processes, III, 100.
- Ruben, S., Hassid, W. Z., and Kamen, M. D., radioactive carbon in the study of photosynthesis, III, 533.
- See also Changus, G. W.
- Rutens, S. M., and Henderson, J. E., spherical ground joints for vacuum systems, I, 224.
- Rubenstein, B. B., comparison of pregnancy urine injection and coitus as stimuli for ovulation in the rabbit, III, 55.
- Rubin, I. C., reopening ligated tubes by uterine insufflation with carbon dioxide, III, 262.
- Rubin, J. See Alving, A. S.
- Rubin, M. A., electro-encephalographic localisation of atrophy in cerebral cortex of man, III, 902.
- and Cohen, L. H., electro-encephalogram in bromide intoxication, III, 469.
- and Freeman, Harry, influence of cyanide on brain potentials in man, III, 373.
- and Wall, C., brain potential changes in man induced by metrazol, III, 671.
- See also Hoagland, H.
- Rubin, S. H., determination of buffer alkali in cutaneous blood, III, 234.
- See also Ralli, E. P.
- Rubini, R., daily variations in p_{H} of human urine, III, 392. Blood-sugar in pigeons of different species, III, 451.
- Rubino, A., effects of ligation of coronary arteries on liver volume and arterial pressure, III, 236.
- Rubinstein, A. M., X-ray analysis of mixed nickel catalysts for dehydrogenation-dehydration, I, 270. Dispersion of platinum catalysts, I, 529. Complex components of platinum and 2-aminopyridine, II, 226.
- Rubinstein, B. E. See Petrenko, B. G.
- Rubinstein, D., the "Du Nouy phenomenon," III, 234.
- and Shekun, L., nicotinic acid requirements of insects: a biological test for nicotinic acid, III, 851.
- See also Norris, J. F.
- Rubinstein, H. S., induction of sexual maturity in the genitally hypoplastic adult, III, 267. Testosterone propionate in treatment of functional uterine bleeding, III, 589. Neural depressing effect of trichloroethylene, III, 1087.
- and Abarbanel, A., influence of water-soluble gonadotropic factor of pregnancy urine on the testes of the normal immature and mature rat, III, 688.
- Abarbanel, A., and Nader, D. N., influence of testosterone propionate on vaginal opening in the immature albino rat, III, 54.
- Rubinstein, M. See Czarnecki, E., and Hurynowicz, J.
- Rubovits, W. H., Taft, E., and Neuwelt, F., pathologic properties of meconium, III, 384.
- Rud, E., heart block, III, 359.
- Rudakov, M. M. See Bezugli, D. V.
- Rudashevski, G. E., inductational tensimeter, I, 161.
- Ruddy, A. W., and Burt, J. B., mercuration of substituted derivatives of thymol. I. Nitroso-derivatives. II. Chloro-derivatives, II, 396.
- Ruddy, M. V., effect of tissue extracts on the respiration of yeast, III, 606.
- Rudel, H. W. See Reichert, J. S.
- Rudenko, E. I. See Nikolaev, V. I.
- Rudenko, N. S., preparation of pure gases and of pentane for cryostats, I, 484.
- Rndenskaya, S. J., development of the latex vessels system as a factor of rubber accumulation in kok-saghyz roots, III, 340.
- Ruderman, E. See Gouguel, B.
- Rudin, E. See Schwarzenbach, G.
- Rudneva, T. I., and Nikitin, N. I., study of larch lignin by the method of alkaline fusion, II, 332.
- Rudnick, P. See Slack, F. G.
- Rudolph, G., differential manometer for measurement of small pressure differences, I, 223.
- Rudolph, W., culture of pathogenic organisms from circulating blood, III, 1107.
- See also Brintzinger, H.
- Rudomanski, V. See Krahulik, L.
- Rudra, M. N., role of manganese in biological synthesis of ascorbic acid, III, 768, 994. Vitamin-C in pulmonary tuberculosis, III, 995.

- Rudy, H., and Cramer, K. E., homologues of alloxandimethylaminoanil [dimethylaminobarbiturilideneaniline] and (barbiturilideniminodimethylaminophenyl)dialuric acids, II, 182. Oxidative degradation of alloxan-2-dimethylaminoanil to 1-methylbenzimidazole, II, 284.
- and Majer, O., dinuclear condensation products from alloxan and 3-amino-2-anilinopyridine, II, 346. 9-Phenyl- and 9-cyclohexyl-azaflavin, II, 347.
- Rudy, W. J. See Guerrant, N. B.
- Rüedi, L., toxic action of novocaine, III, 864.
- Ruehe, H. A., food value of milk below the cream line, III, 162.
- Ruhl, A., oxygen consumption and efficiency of failing heart, III, 557.
- and Thaddeus, S., caffeine and lactic acid metabolism of the heart-lung preparation, III, 359. Action of (I) caffeine, (II) anoxia, on lactic acid metabolism of the heart and lungs, III, 821.
- Ruehle, A. E., application of ultra-violet absorption spectra in establishing the structure of vitamin-B₂, III, 920.
- Rühlmann, W. See Glaser, H.
- Ruhmekorb, F. See Otto, H.
- Ruehrwein, R. A., and Giauque, W. F., entropy of cyanogen; heat capacity and vapour pressure of solid and liquid; heats of fusion and vaporization, I, 602.
- See also Giauque, W. F.
- Ruete, A. E., experiences with short-wave therapy in skin diseases, III, 318.
- Ruf, H. W., and Fluck, W. Z., occurrence of atmospheric lead resulting from use of coloured blackboard crayons, III, 1093.
- Ruff, G. See Modern, F.
- Ruffilli, D., effect of lead, acting at a distance, on tissue cultures, III, 644.
- Ruffin, J. M., and Dick, M., gastric acidity after histamine, III, 841.
- Ruffo, A., phosphatases of liver and spleen, III, 626.
- See also Rossi, A.
- Ruge, H., treatment of sea-sickness, III, 781.
- Ruggiero, W. F. See CoTui, F. W.
- Ruggli, P., Caspar, E., and Hegedüs, B., heterocyclic compounds containing nitrogen. XXXVIII. *iso*Isatogens, II, 178.
- and Dinger, A., heterocyclic compounds containing nitrogen. XLIV. 2:2'-Dinitrodeoxybenzoin, II, 428.
- and Gassenmeier, E., heterocyclic compounds containing nitrogen. XLIII. Di- and tri-acetylbenzene and *p*-phenylenediglyoxal, II, 347.
- and Hegedüs, B., heterocyclic compounds containing nitrogen. XXXIX. Reduction of *o*-nitrobenzil and a further synthesis of 2-phenylisatogen. XL. Condensation of *o*-nitrobenzaldehyde with phenylnitromethane, II, 178, 231.
- Hegedüs, B., and Caspar, E., heterocyclic compounds containing nitrogen. XLI. Additive products of isatogen, II, 231.
- and Preiswerk, E., heterocyclic compounds containing nitrogen. XLII. Linear and angular benzodipyridines. VI. 1:5-Anthrazoline and 4:5-phenanthroline, II, 345.
- and Zaeslin, H., heterocyclic compounds containing nitrogen. XXXVI. Preparation from *oo*-dinitrotolan of a vat dye containing chlorine, II, 177.
- Rugh, R., amphibian gametes as biological test material, III, 684. Relation of the intact pituitary gland to artificially induced ovulation, III, 906.
- Ruhemann, M., two-phase equilibrium in binary and ternary systems. I. System methane-ethane, I, 371.
- Rubland, W., and Ramshorn, K., control of plant respiration by hormones, III, 801.
- Ruhoff, M. B. See Barnett, K. L.
- Ruigh, W. L., modified Beilstein test for halogens in volatile organic compounds, II, 350. Rate of elimination of divinyl ether, III, 1087.
- and Erickson, A. E., reaction of divinyl sulphide with silver oxide, II, 240.
- Rukavishnikov, V., and Alchazov, D., National Radium Institute cyclotron and the generation of the first beams of protons and H₂⁺ ions, I, 341.
- Rule, A. M. See Kolmer, J. A.
- Rule, H. G. See Boyes, W. H. D., and Henderson, G. M.
- Rumbaugh, L. H., Roberts, R. B., and Hatstad, L. R., nuclear transmutations of the lithium isotopes, I, 4.
- Rumford, F., correlation of adsorption and catalytic activity. I. Hydrogen adsorption on zinc-chromium catalysts, I, 329.
- Rumjantzev, A., action of an excess of sodium, potassium, and calcium chlorides on the cytoplasmic structure of embryonic tissue, III, 957.
- and Berezkina, L., effect of excess of chlorides on carbohydrate metabolism in a tissue grown *in vitro*, III, 608.
- Rumpf, E., Fogy, W., and Fröhlich, W., determination of radon and thoron content of a closed air space, I, 335.
- and Geigl, E., observations with small liquid drops, I, 140.
- Rumpf, K. See Jänecke, E.
- Rumpf-Nordmann, (Mme.) M. E., permolybdates, I, 334.
- Rumsey, J. M. See McCullagh, E. P.
- Runcan, V. See Heubner, W.
- Rundle, R. E. See Hendricks, B. C.
- Rundquist, N., *pH* of tissue-fluid in frog-muscle at rest and after exercise, III, 567.
- Runge, H., prolonged pregnancy, III, 588.
- Hutter, H., and Wittmann, L., action of uterus-active substances on rabbit's vagina, III, 757.
- Runnicles, D. F. See Hartley, G. S.
- Runnström, J. See Sperber, E.
- Ruotolo, A., structure and function of the scrotal wall in man, III, 808.
- Rupe, H., and Frey, W., catalytic hydrogenation of 1-cyano-2-benzoyl-1:2-dihydroisoquinoline (Reissert's substance from *iso*quinoline), II, 345.
- and Gysin, H., tertiary amino-alcohols and enols from carvone, II, 71. Optically active zwitterions and enolbetaines, II, 71.
- and Klemm, O., stereoisomeric camphorlideneacetic acids, II, 28. Catalytic hydrogenation of hydroxymethylencyclohexanone, II, 61.
- See also Bidder, H. von, and Gassmann, A.
- Rusanov, A. K., and Alexeeva, V. M., quantitative spectrum analysis of solutions. IV. Determination of cadmium and zinc, I, 157.
- and Bodunkov, B. I., quantitative spectral analysis of solutions. III. Determination of thallium and indium, I, 40.
- Rusanova, A. I., oxidation-reduction potential of iodine. II. Influence of dissolved substances on the redox potential of iodine, I, 324.
- Rusch, H. P., and Baumann, C. A., tumour production in mice with ultra-violet irradiation, III, 491.
- Baumann, C. A., and Kline, B. E., production of xanthoma in rabbits, III, 1077.
- See also Baumann, C. A.
- Ruschig, H. See Ehrhart, G.
- Rushton, M. A., structure of teeth in a late case of osteogenesis imperfecta, III, 888.
- Rusiecki, W. See Modrakowski, J.
- Rusinov, L. I., and Juzefovitch, A. A., soft radiation from bromine, I, 232. X-Ray emission from the isomers of radioactive bromine, I, 397. Isomerism of bromine, I, 397.
- Rusk, H. A., Weichselbaum, T. E., and Somogyi, M., changes in serum-potassium in allergic states, III, 819.
- Ruska, E. See Borries, B. von.
- Ruska, H., technique of super-microscope work, I, 389.
- See also Kausche, G. A.
- Ruskin, S. L., calcium ascorbate in the treatment of the acute rhinitis, III, 289.
- Russ, E. See Bassett, S. H.
- Russell, See Delaville, M.
- Russell, A., and Clark, S. F., constitution of natural tannins. VI. Colouring matters derived from 2:5-dihydroxyacetophenone, II, 557.
- Russell, G. A. See Bruce, E. C.
- Russell, H. N., and King, A. S., arc spectrum of europium, I, 589.
- Russell, J., and Stauffer, R. E., potassium hydrogen phthalate as a buffer for use with the hydrogen electrode, I, 37. Apparatus for electrodialysis, I, 581.
- Russell, J. A., action of insulin and anterior pituitary extract in normal and hypophysectomised rats, III, 473.
- and Craig, J. M., effect of adrenal cortical hormone and anterior pituitary extract on carbohydrate levels in fasted hypophysectomised rats, III, 46.
- Russell, J. J. See Burnett, R. E.
- Russell, L. W., insulin and cardiazol: experiences of the combined method [for psychoses], III, 249.
- Russell, M. A. See Weil, L.
- Russell, M. K. See Witham, L.
- Russell, N. G. See Levy, R. L.
- Russell, R. S., physiology of plant nutrition. IX. Effect of mineral deficiency on fructosan metabolism of barley, III, 338.
- Russell, W. C., [determination of] vitamin-D; use of the tentative method-feeding of non-vitamin-D milk with the reference oil, III, 1074.
- See also Chichester, D. F.
- Russell, W. R., parenteral administration of vitamin-B₂ in treatment of polyneuritis and other conditions, III, 286.
- See also Clark, W. E. Le G.
- Russell, W. W., and Harley, J. H. A., pyknometric determination of lead as sulphate, I, 278. Use of silica cotton in filter crucibles, I, 282.
- Russell-Wells, B. See Haas, P.
- Rusinov. See under Rusinov.

- Russo, G., sodium chloride content of serum and changes of blood composition during venous thrombosis, III, 453. Action of intravenous hypertonic saline on serum-albumins and globulins and on blood and serum viscosity in normal subjects and in patients with heart failure, III, 893. Measurement of effluent fluid in examination of vasomotor action by means of perfusion of vascular preparations, III, 966.
- Russo, P. See De Lucia, P.
- Rust, F. F. See Groll, H. P. A., and Vaughan, W. E.
- Rusznayak, S. See Bennhold, H.
- Rutgers, A. J., and Verlande, E., streaming potential and surface conductivity, III, I, 143.
- Rutgers, G. A. W. See Milatz, M. W.
- Ruth, W. A. See Shields, J. B.
- Rutherford, R. B., and Emery, E. S., clinical effect of colloidal aluminium hydroxide on patients with peptic ulcer, III, 592.
- Rutishauser, E. See De Morsier, G.
- Rutledge, D. I., and Rynearson, E. H., co-existence of diabetes mellitus and diabetes insipidus, III, 974. Diabetes insipidus. II. Treatment by insufflations of powdered pituitary substance, III, 974.
- See also Wilder, R. M.
- Rutzler, J. E., jun., precursors of the anthocyanins of autumn foliage, III, 804.
- See also Bancroft, W. D.
- Ruyper, A. C. See Miller, S. P.
- Ruyssen, R. G., streaming potentials on barium sulphate and ion antagonism, I, 321. Stability and properties of aerosols, I, 520.
- and Rowan, J., viscosity of agar and saponin mixtures, I, 319.
- and Verstraete, E. O. K., saponins. III. Dissociation constant and potentiometric titration of sapoalbinic acid, II, 436.
- Ruzicka, L., Cohen, S. L., Furter, M., and Sluys-Veer, F. C. van der, triterpenes. XLII. Keto-derivatives of oleanolic acid, II, 29.
- and Firmenich, G., diterpenes. XXXVII. Synthesis of geranylgernaniol, II, 220.
- Gatzi, K., and Reichstein, T., steroids and sex hormones. LII. Constituents of the adrenal cortex and related substances. XXIV. Constitution of the ketones formed by treating 17-hydroxy-17-acetylenylandrosterone derivatives with acetic acid in presence of mercury oxide and boron fluoride, II, 327.
- Goldberg, M. W., and Hardegger, E., steroids and sex hormones. LVIII. Transformation of 17-acetylenylandrosterone-3:17-diol into pregnadien-3-ol, II, 546.
- Goldberg, M. W., and Hunziker, F., steroids and sex hormones. LIII. Hydration of 17-hydroxy-17-acetylenyl derivatives of the androstane and androstene series, II, 327.
- Grob, A., and Sluys-Veer, F. C. van der, triterpenes. XLIX. Oxidation of methyl acetyloleanolate and methyl acetylsumaresinonate with selenium dioxide, II, 331.
- and Hofmann, K., triterpenes. XLIII. Synthesis of 1:10-dimethyl-, 1:2:8- and 1:2:10-trimethyl-, and 1:2:9:10-tetramethyl-picene, II, 149.
- Ruzicka, L., and Hofmann, K., steroids and sex hormones. XLIX. 17-Acetylenyl- and 17-vinyl-androstane or -androstene derivatives and their oxidation products, II, 157.
- Huber, K., Plattner, P. A., Deshapande, S. S., and Studer, S., sesquiterpenes. XLIII. Constitution of the caryophyllene mixture; degradation of dihydrocaryophyllene, II, 329.
- Lamberton, A. H., and Christie, E. W., triterpenes. XLII. Oxidation of betulin monoacetate by chromium trioxide to acidic products, II, 29.
- and Marxer, A., triterpenes. XLIV. Transformation of glycyrrhetic acid into β -amyrin, II, 170.
- and Meldahl, H. F., steroids and sex hormones. XLVIII. Conversion of 17-acetylenylandrosterone derivatives into pregnenone derivatives; preparation of 17-hydroxyprogesterone. LI. Neopregnenolone from Δ^5 :3:17-dihydroxy-pregnen-20-one, II, 76, 218.
- Müller, Géza, and Schellenberg, H., triterpenes. XLVI. Keto-derivatives and oxides of the α - and β -amyrin series. XLVII. Introduction of new double linkings in the α - and β -series, II, 330.
- and Müller, P., steroids and sex hormones. L. Rearrangement of *tert*-vinyl alcohols of the androstene series. LIV. Addition of oxygen to $\Delta^{14:17}$:21-acetoxypregnadien-3-one, II, 218, 328.
- and Plattner, P. A., steroids and sex hormones. XLVII. Condensation of cholestenone with oxalic ester, II, 76.
- and Rosenkranz, G., triterpenes. XLVIII. Products of oxidation of lupeol and esters of lupeol with monoperphthalic acid and with selenium dioxide, II, 330.
- Sluys-Veer, F. C. van der, and Cohen, S. L., triterpenes. XLIV. Conversion of oleanol-lactonedicarboxylic acid into ketodihydro-oleanolic acid-derivatives, II, 220.
- and Smith, W. J., structure of triterpenes, II, 80.
- and Wirz, W., triterpenes. L. Transformation of β -boswellie acid into α -amyrin, II, 435.
- Ryang, W. T. See Yun, I. S.
- Rydberg, R., cases of metropathia hæmorrhagica and secondary amenorrhœa treated with gonadotropic hormone, III, 686.
- Ryde, N., intensity ratios of Stark effect components of hydrogen lines. II. Influence of conditions of excitation on the intensity ratios, I, 227.
- Rydin, A. See Josephson, B.
- Rydon, H. N., constitution of caryophyllene. II. Oxidation reactions of caryophyllene and dihydrocaryophyllene, II, 272. Tetrahydrocitrilidene- and citronellylidene-acetic acids; syntheses of *sec*-isoocetylcyclopentane derivatives, II, 551.
- See also Robinson, (Sir) R.
- Ryffel, K. See Briner, E.
- Rygh, O., vitamin-C problems, III, 290.
- Ryle, J. A., clinical sense and clinical science, III, 695.
- Rymer, T. B., thyatron counter for measurement of radiation, I, 222.
- Rynearson, E. H., treatment of Addison's disease, III, 140.
- and Walters, W., unusual case of spontaneous hypoglycæmia, III, 261.
- Rynearson, E. H. See also Roth, G. M., and Rutledge, D. I.
- Ryszelberghe, P. van, generalisation of thermodynamic potentials deduced from affinity, I, 68. Energy of photochemical chemiluminescent, and electrochemical reactions, I, 208.
- Rytand, D. A., number and size of mammalian glomeruli as related to kidney- and to body-weight, III, 151. Determination of total protein and albumin concentrations in plasma, serum, or other fluids, III, 356. Renal factor in arterial hypertension with coarctation of the aorta, III, 1032.
- Rytz, W., jun., aneurin as a growth factor for *Pisum*; evolution of aneurin during germination and development, III, 437.
- S.
- S, J. H., pellagra in East Africa, III, 402.
- Saad, K. See Samaan, K.
- Saba, G., structure of bile acids and their colour reactions; benzaldehyde test for hypo- and anthro-deoxycholic acid, II, 479. Determination of dehydrocholic acid, II, 528. Choleic acid from dog's bile, III, 1060.
- Sabalitschka, T., and Crzellitzer, R., micro-concentrations of mercuric chloride and decomposition of starch by salivary amylase, III, 423.
- Sabathy, R. See Kohlrausch, K. W. F., and Pendl, E.
- Sabatier, P., direct hydrogenations in presence of nickel, II, 465.
- Sabato, E. R., Alfven's hypothesis of a "cosmic cyclotron," I, 444.
- Sabet, Y. S., *Penicillium egyptiacum*, von Beyma, III, 426.
- Sabetay, S., and Trabaud, L., ketones from the vetiver oil, II, 273.
- See also Palfray, L.
- Sabin, A. B., isolation of filterable, transmissible agent with "neurolytic" properties from toxoplasma-infected tissues [action on cerebellum], III, 335. Identification of filterable, transmissible neurolytic agent isolated from toxoplasma-infected tissue as a new pleuropneumonia-like microbe, III, 335. Experimental proliferative arthritis in mice produced by filtrable, pleuropneumonia-like micro-organisms, III, 727. Vitamin-C in relation to experimental poliomyelitis, III, 768.
- Sabin, F. R., cellular reactions to tuberculo-proteins compared with the reactions to tuberculo-lipins, III, 528.
- and Joyner, A. L., cellular reactions to defatted tubercle bacilli and their products, III, 528.
- See also Joyner, A. L.
- Sabine, D. B., preparation of the urease reagent for Wrenn's method for determination of urea in blood and urine, III, 221.
- Sabine, G. B., reflectivities of evaporated metal films in the near and far ultraviolet, I, 407.
- Sabinina, L. E., Babalova, A. A., and Golovko, L. V., potentiometric control in preparation of pure ammonium dichromate, I, 274.
- and Moralev, A. K., potentiometric control of conversion of chromates into dichromates, I, 484.

- Sabinina, L. E., and Rozengard, L. I., photo-nephelometric determination of chloride in chromate and dichromate reagents, I, 37.
- Sacchi, S. See Rabbeno, A.
- Sacerdote, P., ascorbic acid in anoxæmia, III, 167.
- Sacharov, B., oxidase reaction for diagnosis of meningococci, III, 204.
- Sachiev, I., rapid determination of aluminium, calcium, magnesium, potassium, and sodium in the salts of heavy metals, I, 40.
- Sachnovskaja, E. M. See Eru, I. I.
- Sachs, A., Levine, V. E., Griffith, W. O., and Hansen, C. H., copper and iron in human blood; comparison of maternal and foetal blood after normal delivery and after Cæsarean section, III, 1028.
- See also Rothberger, C. J.
- Sachs, I. See Gunn, J. A.
- Sachs, R. G., nuclear and magnetic moments by the α -particle method, I, 352.
- Sachse, J. See Blanck, E.
- Sack, A. M. See Brodski, A. E.
- Sack, G., determining capillary resistance, III, 20.
- Sacks, J., absence of anaerobic recovery in mammalian muscle, III, 826.
- Sacks, M. S. See Peters, H. R.
- Sacks, P., hæmolytic streptococcus meningitis of otitic origin, III, 178.
- Sackur, O., action of organo-magnesium compounds on 1-chlorocyclohexyl methyl and phenyl ketone; secondary replacement of chlorine by a pinacolic change, II, 269.
- See also Tchoubar, B.
- Sacrez, R., specific endogenous nitrogen elimination of guinea-pigs in early stages of avitaminosis-C, III, 168.
- Sadasivan, V. See Sreenivasan, A.
- Saddy, J., sensitisation of phosphorescent zinc sulphide to the action of red rays, I, 451.
- Sadowski, T. See Moraczewski, W. von.
- Sadron, C., Bonot, A., and Mosimann, H., dynamic birefringence (Maxwell effect) of glycerinated protein solutions, I, 417.
- Sadusk, J. F., sulphanilamide therapy in pneumonia and meningitis due to type 3 pneumococci, III, 502. Temporarily positive Kahn and Wassermann reactions [in infectious mononucleosis], III, 876.
- and Manahan, C. P., sulphanilamide in *Cl. welchii* puerperal infections, III, 1081.
- Säaf, G. von. See Lüttringhaus, A.
- Saechting, H., theory of technical methods of measuring p_H with the glass electrode, I, 94.
- [with Richter, H., and Rosenthal, H. G.], influence of conditions of measurement, particularly of temperature, on the resistance of glass electrodes, I, 147.
- Saegesser, M., idiopathic tetany, III, 41.
- Sallstrom, T. See Nylin, G.
- Saenz, A., allergy and immunity produced by dead bacilli suspended in vegetable oils, III, 105.
- and Canetti, G., differences in pulmonary lesions produced by dead bovine and human bacilli, III, 431.
- Safarov, A., influence of light and dark on the redox potential of the visual zone of the cerebral cortex, III, 248.
- Safarov, A., seasonal variations in electrolyte content of plasma and erythrocytes, III, 555. Effect of seasonal factors on electrolyte content of plasma and erythrocytes, III, 819.
- Safavi, R. See Fromageot, C.
- Saffer, C. M., jun. See Schumb, W. C.
- Safford, V. See Irving, L.
- Sagane, R., radioactive isotopes of copper, zinc, gallium, and germanium, I, 172.
- Kojima, S., Miyamoto, G., and Ikawa, M., neutron-induced radioactivity in niobium, I, 54.
- Sagara, S., action of diphtheria toxin on heart function, III, 203.
- Sagastume, C. A., and Oliva, V., [use of] urobilin in identification of small quantities of copper and mercury, I, 218.
- Vucetich, D., and Nico, R., determination of proteins in cerebrospinal fluid, III, 673.
- Sage, B. H., Evans, H. D., and Lacey, W. N., phase equilibria in hydrocarbon systems; latent heat of vaporisation of propane and *n*-pentane, I, 410.
- Yale, W. D., and Lacey, W. N., effect of pressure on viscosity of *n*- and isobutane, I, 191.
- See also Budenholzer, R. A.
- Sage, D., bacteriophage technique, III, 335.
- Sager, O., and Kreindler, A., electroencephalographic studies of epilepsy, III, 669.
- Sagortschev, B., thermal behaviour of compounds important in analysis. II. Calcium and strontium oxalate, I, 90. Investigation of precipitation processes, in which bismuth and lead ions take part, by means of the corresponding radioactive isotopes, I, 278.
- Sah, P. P. T., conversion of amino-acids and polypeptides into alkaloids of the ephedrine and adrenaline types, II, 40. Azides. XI. β -Naphthazide and β -naphthyl carbimide as reagents for identification of phenols. XII. 3:5-Dinitro-4-methylbenzazido, II, 351, 398. Identification of ethers, II, 463. Conversion of carbohydrates into vitamin-C, III, 289.
- and Chang, L. H., azides. IX. *m*-Bromobenzazide as a reagent for the identification of amines, II, 196.
- and Cheng, P. Y., azides. XIII. *p*-Bromobenzazide, II, 398.
- and Chiao, S. H., azides. XIV. *p*-Nitrobenzazide, II, 398.
- and Kao, I. S., semicarbazides. VIII. *p*-Xenylsemicarbazide as a reagent for identification of aldehydes and ketones, II, 351.
- and Tao, K. Y., azides. X. *p*-Bromobenzazide as a reagent for the identification of alcohols, II, 194.
- and Yui, K. H., azo-dyes from naphthidine(4:4'-diamino-1:1'-dinaphthyl), II, 474.
- Saha, H. See Rây, P.
- Saha, K. C., and Guha, B. C., nutritional investigations on Bengal fish, III, 917.
- Sahama, T. G., accessory elements in granulites from Finnish Lapland, I, 587.
- Sahara, T. See Kuré, K.
- Saharia, G. S. See Desai, R. D.
- Sahlgren, E. See Marcus, H.
- Sahs, A. L., and Alexander, L., vascular pattern of intracranial neoplasms: studies with benzidine stain, III, 831.
- Sahyun, M., effect of zinc on insulin and its mechanism, III, 582.
- and Goodell, M., determination of amino-acid-nitrogen in blood and urine, III, 440.
- Nixon, A., and Goodell, M., influence of certain metals on the stability of insulin, III, 506.
- Sai, T., thyroid activity in Kaschin-Beck disease, III, 840.
- Saidman, J. See Laroche, G.
- Saier, E. See Grauer, R. C.
- Saifer, A., and Hughes, J., determination of chlorides in biological fluids by the use of adsorption indicators; use of dichlorofluorescein for the volumetric microdetermination of chlorides in zinc filtrates of biological fluids, III, 886.
- Saifi, M. F. See Vaughan, J. M.
- Sailer, S., subacute bacterial endocarditis treated with sulphanilamide resulting in granulocytopenia and death, III, 774.
- St. Helens, H. J. See Wilkins, T. R.
- St. John, F. B., Flood, C. A., and Gius, J. A., effect of partial gastrectomy on acidity and peptic activity of gastric juice, III, 689.
- Saito, M. See Suzue, K.
- Saito, N. See Funakoka, S.
- Sakaguchi, K., and Inoue, T., production of ethylene oxide- α -dicarboxylic acid by moulds. IV., III, 327.
- and Ôtani, Y., yeasts of genus *Schizosaccharomyces* indigenous to Iô island, III, 521.
- Sakaguti, H., effect of ultra-violet rays on dehydrogenase of rabbit's skin, III, 318. Influence of carcinogenic compounds on oxidation enzymes, III, 598.
- Sakai, K., prevention of tuberculosis by subcutaneous vaccination with BCG, III, 528. Changes in the blood-sugar content caused by muscular exercise, III, 620.
- Sakai, R. See Klenk, E.
- Sakamoto, S., organic micro-analysis. VII. Improvements to Pregl's micro-analytical apparatus, II, 461.
- See also Uyeo, S.
- Sakan, T. See Kotake, M.
- Sakano, N., influences of various organ cell constituents inoculated parenterally on hepatic detoxicating function, III, 149.
- Sakata, S. See Yukawa, H.
- Sakato, Y. See Takei, S.
- Sakel, M., influence of pharmacological shocks on the psychoses, III, 250.
- Sakmann, B. W. See Mueller, H.
- Sako, W., Dwan, P. F., and Platou, E. S., sulphanilamide and serum in treatment and prophylaxis of scarlet fever, III, 176.
- Saksena, R. K., growth of *Pythium hyphalosticton*, Sideris, in synthetic nutrient liquid media, III, 791.
- Sakui, S., growth of a magnesium crystal in its vapour, I, 12.
- See also Masima, M.
- Sakurada, I., and Hutino, K., enlargement of lattice of cellulose hydrate by absorptive linking of water, I, 13.
- and Lee, S., dielectric investigations on solutions of fibrous molecules, I, 469.
- See also Lee, S.

- Sakurai, B., electrolytic reduction of naphthalimide and its derivatives, II, 388.
- Sakurai, K. See Sugawara, S.
- Sakurai, R. See Ido, T.
- Sakurai, T., innervation of toad intestine. I. Stimulation experiment, III, 986. and Noda, J., prognosis in schizophrenia, III, 248.
- Sakurai, Y. See Asahina, Y.
- Salaman, M. H. See Macfarlane, M. G.
- Salaman, R. N., potato virus "X"; its strains and reactions, III, 105.
- Salamon, E. See Besredka, A.
- Saland, G., Klein, C., and Zuroff, H., thermal reflex vasodilatation test in peripheral vascular disease, III, 823.
- Salant, E. O., Horvath, W. J., and Zagor, H. I., absorption of slow neutrons of different energies by boron, cobalt, and manganese, I, 171.
- Roberts, R. B., and Wang, P., interaction of fast neutrons with protons, I, 396.
- Salazar, M. T. See Moles, E.
- Salceanu, C., apparatus for measuring the velocity of sound in liquids by a resonance method; measurement of the velocity of sound in mercury, I, 132. Velocity of sound in binary liquid mixtures by a resonance method, I, 192. Determination of the viscosity of liquids, I, 494.
- and McCormick, H., determination of surface tension of liquids by weighing of falling drops, I, 390. Surface tension of equimolar solutions, I, 468.
- Salellas, J. F., variation of the colour of *p*-nitroacetanilide on diluting its solution in sulphuric and nitric acids, II, 207.
- Salerno, J. P., intrauterine pressure during first stage of labour, III, 382.
- Salgues, R., blood-phosphorus of domestic and wild vertebrates in normal and pathological conditions, III, 121. Mineralisation of plumage in osteomalacia, III, 501. *Fennugreek (Trigonella fœnum-græcum, L.)*, III, 1112.
- Salichov, S. G. See Kozirev, B. M., and Zavojski, E. K.
- Salisbury, L. F., and Anderson, R. J., chemical composition of *Cysticercus fasciolaris*, III, 916.
- Salisbury, W. W., and Porter, C. W., improved magnetostriction oscillator, I, 341.
- Salischtscheva, N. E. See Nikolaev, V. I.
- Salit, P. W., nitrogen content of cataractous and sclerotic human lenses, III, 674. Reaction and buffer activity of normal ox lenses, III, 751.
- Salitówna, A. See Hasko, M.
- Salkind, J. S., and Aizikovitch, M. A., synthesis of an alcohol with two conjugated triple linkings, II, 531.
- and Belikova, M. V., structure of polychlorodiphenyls, II, 253.
- and Gverdzteli, I. M., synthesis of glycols of the diacetylene series, II, 531. Hydrogenation of acetylenic compounds. XXXI. Catalytic hydrogenation of acetylenic γ -glycols with a cyclopentyl radical, II, 545.
- and Nogaideli, A. I., action of bromine on ethylenic glycols, II, 239. Hydrogenation of acetylenic compounds, XXX. Catalytic hydrogenation of dimethyldiisopropylhexinediol, II, 239.
- Salkind, S. J., mitogenetic diagnosis of malignant tumours, III, 489.
- Sallet, J. See Chabrol, E.
- Salley, D. J., reaction of sulphur trioxide with sodium chloride, I, 333.
- Sallinger, H., and Hwang, Y., colorimetric determination of very small amounts of nitrate in the form of ammonia, I, 96.
- Salm, H., action of nicotinamide in pellagra, III, 767.
- See also Widenbaner, F.
- Salmi, E. J., ether-like compounds. II. Acid hydrolysis of ether-lactones having a five-ring, I, 204.
- and Jansson, I. J., cyclic acetals of furfuraldehyde, II, 559.
- and Pohjolainen, A., ether-like compounds. IV. Preparation of 1:3-dioxol-5-ones, II, 241.
- and Rannikko, V., ether-like compounds. III. Cyclic ketals of acyclic etones, II, 202.
- and Renkonen, E., ether-like compounds. V. Preparation of ethers of triphenylcarbinol, II, 316.
- See also Palomaa, M. H.
- Salminen, A., composition of Finnish clays, I, 288. Combined calomel and measuring electrodes, I, 389.
- Salmon, A., role of sympathetic system in physiopathology of pain, III, 35. Problem of sleep, III, 130. Relation of diencephalo-hypophyseal system to migraine, III, 834.
- Salmon, T. N., effect on growth-rate of thyro-parathyroidectomy in newborn rats and of subsequent administration of thyroid, parathyroid, and anterior hypophysis, III, 41.
- Salmon, U. J., effect of testosterone propionate on genital tract of the immature female rat, III, 268.
- Walter, R. I., and Geist, S. H., effect of testosterone propionate on glycogen content of human vaginal smears, III, 384. Production of progestational endometrium in post-menopausal women with Δ^4 -pregnen-17-in-17-ol-3-one administered orally, III, 982.
- See also Geist, S. H.
- Salmon, W. D. See Prickett, C. O.
- Salmon-Legagneur, F., *aa*-diphenylsuccinic acid, II, 321.
- Salomon, A., new water-soluble calcium salt, calcium gluconate-glucoheptonate, II, 405.
- See also Pinkus, A.
- Salomon, G., relative rate of ring-closure reactions, I, 32.
- See also Wynne-Jones, W. F. K.
- Salomon, H. See Dam, H., Demole, V., and Karrer, P.
- Salter, W. T., clinical pathology, III, 596.
- See also Nathanson, I. T., and Wilson, H.
- Saltikov, G. S., synergistic and antagonistic effects of ions on precipitation of serum-colloids, III, 421.
- See also Obergard, I. A.
- Saltman, S. Y. See Kohn, R.
- Saltman, W. See Katz, D. L.
- Saltups, H., insulin shock therapy in schizophrenia, III, 250.
- Salus, R., vascular system of fovea centralis, III, 1041.
- Salvatori, A., effect of intravenous injection of aqueous extracts of liver, kidney, and intestine on blood-chlorides in rats, III, 119. Chloride content of organs and tissues of rats of different ages, III, 394. Content of chloride in bilateral organs and tissues, III, 987.
- Salvesen, H. A., diastolic regurgitation murmur heard near and at the apical region of the heart in uræmia with negative autopsy findings, III, 557.
- Salvestrini, H. See Croxatto, H.
- Salzman, C. See Gold, H.
- Salzmann, O. See Mannich, C.
- Samaan, A. See Bouckaert, J. J.
- Samaan, K., and Saad, K., [pharmacology of] β -diethylaminoethyl diphenylacetate hydrochloride, III, 504.
- Samdahl, B., and Christiansen, T., local anaesthetics derived from benzoylbenzoic acids, II, 69.
- Samec, M., colloid chemistry in the service of starch research, I, 76. Starch, II, 301.
- [with Dolar, P.], enzymic amylolysis. VIII. Initial phase in hydrolysis of starch by α -diastase, III, 787.
- and Blinc, M., study of starch. II, II, 143.
- and Katz, J. R. [with Čanič, Z., and Klemen, R.], plant colloids. XLVI. Ageing of starch solutions considered from the colloid-chemical, enzymic, and X-radiographical point of view, I, 258.
- Samén, B., halogen derivatives of triethylsulphonylmethane, II, 97.
- Samis, C. S., and Hartley, G. S., transport numbers of paraffin chain salts in aqueous solution. III. Measurements on salts: influence of valence and nature of the gegen-ion, I, 28.
- Sammartino, R., and Arenas, N., vaginal biopsy for determination of sex cycle in dog, III, 980.
- See also Arenas, N.
- Sammartino, U., tissue modifications due to "mogral," III, 617. Effect of "mogral" on experimental tuberculosis in guinea-pigs, III, 711.
- Samochvalova, G. V., effect of low temperatures on fish, III, 393.
- Samoilov, V. I. See Krulink, A. S.
- Sampath, S., Singh, B. N., and Bansal, R. K., effect of colchicine on plant cells, III, 637.
- Sampson, W. L., and Fernandez, L., experimental convulsions in the rat, III, 509.
- See also Tishler, M.
- Samson, M., relationship of cuprous creatinine to tests for sugar in urine, III, 1114.
- Samsonia, A. M. See Tishchenko, V. E.
- Samtsov, V. A., comparative pathology of anaphylaxis, III, 512.
- Samuels, L. T., factors in use of surface antiseptics, III, 433.
- Samuelsen, E. See Andersen, F.
- Samuelsen, O., use of base-exchange substances in analytical chemistry. I, I, 385.
- Samwick, A. A. See Morrison, M.
- San-Tsiang, T., proton groups emitted during α -ray bombardment of substances containing hydrogen, I, 349.
- Sanarelli, G., salivary haemorrhagic allergy, III, 512.
- Sánchez, A., nucleic acids; two colorimetric methods of determination and new reactions for yeast-nucleic acid, III, 885.
- Sanchez-Calvo, R., action of forcible stretch of neck on thyroid function, III, 1049.

- Sand, K., and Plum, P., urinary excretion of testis hormone during treatment of dystrophia adiposo-genitalis with gonadotropic hormone, III, 53.
See also Okkels, H.
- Sandals, K. M. See Moxon, A. L.
- Sandberg, C. See Brody, S.
- Sandberg, M., Perla, D., and Holly, O. M., metabolism of nitrogen, calcium, magnesium, and phosphorus in thymectomised rats, III, 40. Effect of castration in albino rats on nitrogen, sulphur, chloride, sodium, and potassium metabolism, and on changes in weight and food intake, III, 586.
See also Perla, D.
- Sandberg, S. O. See Hedvall, J. A.
- Sande, A., gold therapy and vitamin-C, III, 414.
- Sandell, E. B., catalytic colour reaction for tungsten, I, 101. Determination of cadmium in silicate rocks, I, 488.
Hey, M. H., and McConnell, D., composition of francolite, I, 585.
and Kolthoff, I. M., calcium oxalate monohydrate as a weighing form for calcium, I, 217.
and Perlich, R. W., determination of nickel and cobalt in silicate rocks, I, 489.
- Wishnick, D. M., and Wishnick, E. L., detection of zinc with β -naphthoquinoline and thiocyanate, I, 39.
- Sandeman, I., molecular spectra of hydrogen isotopes. I. Application of the rotating vibrator model to the states of D_2 . II. Assumption of a common potential function for the isotopic states, I, 400, 596.
- Sander, E. See Bühler, K.
- Sander, F., tissue acidosis with normal blood alkali reserve, III, 118.
- Sandera, K., automatic registration of the course of chemical reactions, I, 538. Sucrose octa-acetate, II, 300.
and Sommer, E., rapid determination of sulphuric and hydrochloric acids in presence of each other by means of conductometric neutralisation analysis, I, 534.
- Sandermann, W., formation of oil of caraway, III, 109.
- Sanders, H. G. See Garner, Frank Harold.
- Sanders, M., cultivation of viruses, III, 1104.
- Sanderson, E. S., Greenblatt, R. B., and Baethke, E., complemental fixation test in chancroidal infection, III, 338.
- Sanderson, J. A. See Andrews, D. H.
- Sanderson, R. T. See Schlesinger, H. I.
- Sandin, R. B., and Evans, T. H., structure of naphthalene, hydrindene, and tetrahydronaphthalene derivatives, II, 541.
- Gillies, A., and Lynn, S. C., structure of fluorescein, sulphonefluorescein, and their halogenated derivatives, II, 556.
- McClure, F. T., and Irwin, F., decomposition of iodonium salts; reactions with mercury, tellurium, and antimony, II, 566.
- Sandler, L. See Farkas, L.
- Sando, C. E. See Riemenschneider, R. W.
- Sandor, G., adsorption of the diphtheria antitoxin on alumina, III, 875. Dissociation of the specific flocculum obtained in mixtures of diphtheria toxin and antitoxin by proteolytic digestion; production of a highly purified diphtheria antitoxin, III, 875. Purification of antidiphtheria serum by [enzymic] digestion, III, 875.
- Sandor, G., and Goldie, H., acetylation of proteins by keten. I. Method; results with antidiphtheric serum, II, 94. Nature of the attenuation of the anaphylactogenic power of acetylated antidiphtheria serum, III, 93. Attenuation of anaphylactogenic power of serum-proteins by keten, III, 338.
and Richou, R., purification of anti-tetanus serum by [enzymic] digestion, III, 945.
and Tabone, J., unstable acetyl groups in proteins of horse serum, III, 11.
See also Boquet, A., Goldie, H., and Sehaefer, W.
- Sands, D. E., insulin premedication in convulsion therapy, III, 1050.
- Sandstrom, A. E., action of soft X-rays on selenium barrier layer cells, I, 9.
- Sandulesco, G., and Girard, A., quantitative separation of alcoholic substances, II, 133.
- Sandved, K. See Terjesen, S. G.
- Sandys, O. C. See Zuckerman, S.
- Saner, W. R. See Sisson, W. A.
- Sandflippo, G., temporary muscular paralysis during strychnine poisoning in rabbits, III, 1004.
- Sanford, H. N. See Grulee, C. G.
- Sanford, H. S., and Bair, H. L., visual disturbances associated with tumours of temporal lobe, III, 904.
- Sanfourche, A. A., neutral phosphate and hydroxyapatite of lithium, I, 153. Magnesium hydroxyapatite, I, 210. Basic phosphates of beryllium and zinc, I, 531.
and Kravine, J., aluminium silico-fluoride, I, 483.
- Sanguinetti, T. See Migone, L.
- Sanides, F., Foster's carcinoma reaction, III, 159.
- Saniélévici, A. See Haissinsky, M.
- Sanigar, E. B., Krejci, L. E., and Kraemer, E. O., effect of ultra-violet radiation and soft X-rays on sedimentation and light-absorption by purified human serum-albumin, III, 319.
- Sankaran, D. K. See Guha, P. C.
- Sankaranarayanan, N. S., haematological studies in Indian dairy animals, III, 546.
- Sanner, V. H., Röntgen spectrum of titanium and titanium oxide, I, 348.
- Sannié, C., and Poremski, V., Raman spectra and structure of amides, I, 451. Determination of small amounts of nickel, zinc, lead, and mercury by micro-electrolysis and spectrography, I, 579.
and Truhaut, R., can the ingestion of wheat-germ oil produce cancer? III, 989.
See also Oberling, C.
- Sano, I., catalytic decomposition of oxalic acid by colloidal platinum carbonyl, I, 377.
- Sansone, (Signa.) B. See Caronna, G.
- Santa, N. See Giroud, A.
- Santavy, F., tissue-glutathione in guinea-pigs in anaemia, III, 119. Glutathione content of various parts of the heart, III, 122. Glutathione in newborn animals, III, 406.
and Kadlek, K., blood-glucose in dogs poisoned by colchicine, III, 190.
and Sery, Z., glutathione and colchicine poisoning in guinea-pigs, III, 190.
- Santennoise, D., Frank, C., Grandpierre, R., and Vidacovitch, M., effect of vagotonin on pulmonary ventilation, III, 181. Effect of vagotonin on reflex apnoea, III, 506. Effect of vagotonin on reflex control of respiration, III, 308.
- Stankoff, E., and Vidacovitch, M., effect of vagotonin on respiratory excitation produced by chemical stimulation of carotid sinus, III, 311.
- Santesson, C. G., curare-like substance in seeds of a leguminose, III, 90.
- Sántha, K. von. See Penfield, W.
- Santi, U., bismuth in the cure of syphilis, III, 189.
- Santoni, G. See Dumazert, C.
- Santos, F. O. See Gutierrez, M.
- Sapeika, N. See Shapiro, H. A.
- Saphir, O. See Reis, R. A.
- Saphir, W., Wassermann reaction in infectious mononucleosis, III, 647.
Howell, K. M., and Kunstadter, R. H., human serum response to gonadotropic hormone, III, 576.
- Sapirstein, M. R., Herman, R. C., and Wechsler, I. S., mechanism of after-contraction, III, 247.
- Saposhnikova, N. V., kinetics of reactions of different ionic types in solution. I, I, 571.
- Sappington, S. W., technique of venipuncture, III, 124. Heparin in blood transfusions, III, 1028.
- Sappington, T. S. See Wilson, H.
- Saprikin, F. J. See Dobrianski, A. F.
- Sarac, C. See Boutaric, A.
- Saracoglu, K. S., essential hypertension, III, 457.
- Sarata, U., biochemistry of copper. XXXV. Copper in rice plant and seed at various periods of development. XXXVI. Solution of copper in soils. XXXVII. Copper content of horse blood; effect of septic conditions. XXXVIII. Copper content of bone marrow in healthy and anæmic horses, III, 176.
- Sarciron, R. See Boivin, A.
- Särly, E., effect of vitamin-C on adrenaline content of blood and adrenals of normal and thyroidectomised guinea-pigs, III, 75.
- Sargent, B. W. β - and γ -rays of actinium-B and actinium-C', I, 442. Half-periods of actinium-B, actinium-C'', and uranium-X, I, 442.
- Sargent, L. J. See Barger, G.
- Sarie, R., reticulo-endothelial system and hyperglycæmia, III, 451. Cheyne-Stokes respiration, III, 824.
and Dumon, G., morning variation in blood-sugar; its importance in functional tests, III, 232.
See also Aubertin, E.
- Sarkamies, P. See Sihvonen, V.
- Sarkar, T. C. See Rây, P. R.
- Sarkisov, E. S., electrocrystallisation of metals with and without connexion of the electrode to earth with a continuous current and a high-voltage source of supply, I, 268.
- Sarnowiec, W., appearance of filterable forms of *Brucella abortus* (*B. bovis*) in media to which tuberculin is added, III, 202. Influence of culture filtrates [of various strains] on growth of tubercle bacilli in deep cultures, III, 877.

- Sarre, H., normal and pathological oxygenation of the kidney, III, 274. Blood flow through the kidney in experimental glomerulonephritis, III, 693.
See also Enger, R.
- Sartori, E., thymo-pancreatic synergism, III, 475. Semi-micro-methods for determination of water in blood, plasma, and corpuscles, III, 552. Functional synergism between thymus and pancreas, III, 1050.
- Sartori, M., and Recchi, E., diphenyl-fluoroarsine, II, 350.
- Sartory, A., Meyer, Jacques, and Netter, A., activating effect of different mixtures of energy factors, in optimum doses, on the growth of a *Staphylococcus* and of an abiotic yeast, III, 944.
- Meyer, Jacques, and Schmutz, D., relationship between the dose of water-soluble vitamin and initial sowing of bacteria studied by activation of growth, III, 427. Favourable effect on growth of bacteria of vitamin-B₁ and -B₂ together and in varying doses in the culture medium, III, 530.
- Sarudi, I., determination of zinc as zinc mercury thiocyanate, I, 487.
- Saruta, N., fate of carbon monoxide in air, III, 366.
- Sarzana, G., metabolism and respiratory quotient of pigeons in adaptation to cold, III, 606.
- and Fazio, F., defence energy-mechanism of phloridzinised rats against low temperature, III, 997.
See also Artom, C.
- Sas, L., distribution of residual nitrogen in blood after overdosage with protein and during experimental kidney lesion, III, 554.
- Sasa, T. See Shibata, R.
- Sasagawa, K., investigations on physiology of circulation in the Institute of Physiology at Osaka in the last 10 years, III, 654.
- Sasaki, A., amino-acids extracted from sardine muscle, III, 368. Nitrogen partition in fish muscle, III, 368. Effect of various enzymes on carnosine, III, 722.
- Sasaki, M., effect of morphine on cultures of fibroblasts, III, 312.
- Sasaki, Shigeru, metabolism of *o*-iodobenzoic acid, III, 174.
- Sasaki, Shuiku, and Tō, S., cell-wall constituents of soya bean. II. Constituents of seed coat, III, 951.
and Yamashita, Y., cell-wall constituents of soya bean. I. Embryo of the seed, III, 110.
- Sasaki, T., constants of Hill's formula for oxygen dissociation curve of human and goat's blood, III, 968.
- Sasaki, Takaoki, and Hashimoto, T., synthesis of peptide-like derivatives of aminohydrocarbostyryl; amyostatic poisons, II, 520.
- and Nagao, N., action of 4-dimethyl-aminoazobenzene-4'-arsinic acid, III, 934.
- and Ueda, H., synthesis of diamino-hydrocarbostyryl by the diketopiperazine method; amyostatic poisons, III, 934.
- Sasaki, Takasi, constituents of ether- and alcohol-extracts of "matsudake" fungus (*Armillaria edodes*), III, 733.
- Sasaki, Toyosaku. See Yasue, M.
- Sasaki, Tsunetaka, nature of foam. II. Foam formation of the ternary system acetic acid-ethyl ether-water. III. Foam formation of the ternary system, acetic acid-benzene-water. IV. Phase inversion and foaming of emulsions consisting of acetic acid, ethyl ether, and water. V. Phase inversion and foam formation in an emulsion of acetic acid, benzene, and water. VI. Emulsion and foam formation in the system ethyl alcohol-ethyl ether-water, I, 141, 196, 304, 368, 520.
- Sasaki, Y. See Tadokoro, T.
- Sashin, D. See Kling, D. H.
- Saslavski, I. I. See under Zaslavski, I. I.
- Saslow, G., oxygenation of fluids and occurrence of oedema in perfused frog web, III, 358. Osmotic pressure of gum acacia solutions, III, 892.
- Sastri, B. N. See Ganapathy, C. V., and Ranganathan, V.
- Sastri, M. V. C., adsorption of methylene-blue by active carbon, I, 72.
- Sastri, V. D. N. See Rao, P. S.
- Sata, N., effect of ultrasonic waves on colloid phenomena. VI. Influence on rotatory power of high-molecular colloidal substances. I. and II, I, 369, 521.
and Naruse, N., effect of ultrasonic waves on colloid phenomena. V. Influence on thixotropy. I. Thixotropic systems with aluminium hydroxide, I, 142.
and Okuyama, H., colloid chemical investigations of three-component liquid systems. III. Emulsification of systems in which both liquid phases have the same sp. gr., I, 368, 416.
- Sasaki, Y., and Sato, Hachiro, circulatory and respiratory efficiency of university students, III, 620.
- Sato, Hachiro. See Ishikawa, F., and Sasaki, Y.
- Sato, Hiroshi, Hatano, M., and Muto, T., epinephrine output rate after atropine, III, 682. Action of atropine on epinephrine secretion caused by morphine or insulin, III, 682.
- Sato, Masakazu, Hirano, and Kamati, H., use of amyl alcohol in the Van Slyke method for determining the nitrogen distribution in proteins, III, 1113.
- Hirano, T., and Kan, T., Okuda's iodine method for determination of cystine, II, 527.
- Sato, Mitsu, energy states of the valency electrons in metals. I. 10. Anomalous changes of various properties of zinc with temperature, I, 246.
- Sato, S., and Isono, S., periodic occurrence of methylglyoxal-like substance in human milk and periodic weakening of Arahawa's reaction; influence of menstruation on human milk, III, 696.
- Sato, T., moulds which grow in high concentration of sulphuric acid and cupric sulphate, III, 725.
See also Ogata, A.
- Sato, Tatsuo. See Asano, S.
- Satoda, I. See Sugawara, S.
- Satoh, Shun-ichi, heats of formation of various nitrides, I, 27. Specific heats of manganese nitrides, I, 248. Heat of formation of manganese nitrides, I, 265. Atomic heat of nitrogen in various nitrides. II., I, 310.
- Satoh, Shun-ichi, specific heats of thorium nitride, lithium nitride, and zinc nitride, I, 310. Heat of formation and specific heat of molybdenum nitride, I, 373. Heat of formation and specific heat of tantalum nitride, I, 473. Heat of formation and specific heat of calcium nitride, I, 524.
and Sogabe, T., specific heats of solid aliphatic acids and their ammonium salts and the atomic heat of nitrogen, I, 461.
- Satomi, M. See Kondo, H., and Tomita, M.
- Satterfield, G. H. See Holmes, A. D., and Yarbrough, M.
- Saubermann, G. B. C., influence of light intensity on size of blind spot in normal eye, III, 1042.
- Saubert, G. G. P. See De Jong, H. G. B.
- Sauer, Eberhard, and Aldinger, W., protective colloids, I, 76.
- Sauer, Elisabeth, glacial lake deposits in the Isar valley, I, 46.
- Sauer, L. W., [immunisation and prophylaxis of] whooping cough, III, 630.
- Saukov, A. A., nephelometric method for determining small quantities of mercury, I, 99. Mercury in barytes, I, 437.
- Saulnier, F. See Moricard, R.
- Saum, A. M. See Frampton, F. L., and Neurath, H.
- Saunders, O. A., natural convection in liquids, I, 558.
- Saunderson, J. L. See Goudsmit, S.
- Saunier, R. See Dubourg, J.
- Sauter, E., macromolecular compounds; lattice estimation of rubber, I, 458. Relation between the lattices of natural and hydrated cellulose, I, 458.
- Sauter, F., theory of the ideal magnetisation curve, I, 65. Theory of electrical resistance of a good conductor, I, 246.
- Sauvenier, H., spectra of palladium, silver, and gold between 90 and 250 Å., I, 439.
See also Hautot, A.
- Savage, J. E., Wylie, H. B., and Douglas, L. H., chemical test for pregnancy applied to determination of oestrin in urine of normal and toxemic patients in the last trimester of pregnancy, III, 58.
- Savage, R. M., and Chambers, W. P., determination of blood-clotting activity of thrombin surgical dressings, III, 10.
- Savard, J., and De Hemptinne, M., critical potentials of carbon monoxide, I, 183.
- Savelli, R., distribution of red carotenoid in the chlorochromoplasts, III, 445.
- Savitch, P., gaseous radioelement formed in uranium bombarded with neutrons, I, 235.
See also Curie, (Mme.) I., and Halban, H. von, jun.
- Savitz, H. A. See Derow, H. A.
- Savitzki, A. J., 3,5-di-iodo-L-tyrosine, its properties and preparation, II, 547.
- Savornin, J., distant diffraction, I, 182.
- Savostianov, E. A. See Volkov, K. P.
- Savtchenko, G. S. See Karpov, V. G.
- Savva, A. See Apostolakis, C.
- Sawano, E., proteolytic system in the Ciliata; *Paramecium caudatum*, III, 198.
- Sawlewicz, J., degradation of deoxycholic acid to bisnorcholic acid, II, 265.
- Sawyer, R. A., and Vincent, H. B., characteristics of spectroscopic light sources, I, 491.
See also Ho, I. D.

- Sawyer, S. D. See Larson, H. W.
- Sax, K., time factor in X-ray production of chromosome variations, III, 809.
and Mather, K., X-ray analysis of progressive chromosome splitting, III, 809.
- Saxena, B. D., depolarisation of unmodified light-scattering in liquids, I, 120.
- Saxton, J. A., jun., and Greene, H. S. N., age and sex differences in hormone content of the rabbit hypophysis, III, 575.
See also Greene, H. S. N.
- Sayama, S., action of anterior pituitary extract in thyroidectomised rabbits, III, 839. Action of extract of epithelium and of colloid of thyroid gland, III, 840. Action of anterior pituitary extracts on rabbits, III, 905.
- Sayce, E. L., effect of heat on an air-damped balance, I, 44.
- Sayers, J., ionic recombination in air, I, 169.
- Sayers, R. R., and Dreesen, W. C., asbestosis, III, 621.
See also Flinn, R. H.
- Sayles, L. P., alizarin-red S technique applied to elasmobranch integument, III, 1.
- Saylor, C. P. See Wichers, E.
- Saylor, J. H. See Gross, P.
- Sayvetz, A., kinetic energy of polyatomic molecules, I, 406.
- Sazawa, N., epinephrine load of the adrenal gland of atropinised rabbits, III, 682. Influence of atropine on reduction of epinephrine content of adrenal gland due to certain agencies, III, 682. Influence of chloralose on blood pressure in cats, III, 966. Influence of chloralose on pressor effect of splanchnic stimulation and of adrenaline, III, 966.
- Sazonova, V. A. See Juriev, J. K.
- Seadon, S. J. See Rappoport, E. M.
- Scaffidi, V., jun., relationship between arterial and venous pressures during normal circulation, III, 459. Pharmacology of β -*p*-hydroxyphenylisopropylmethylamine ("veritol"), III, 508.
- Sealera, J. F., typhoid antibodies, III, 207.
- Scalf, L., action of permeable substances on the dispersion of bacteria in the organism of tubercular guinea-pigs, III, 877.
- Scalori, G., innervation of laryngeal glands, III, 563.
- Scalzo, G., innervation of umbilical cord, III, 740.
- Scammell, H. L., industrial skin lesions, III, 317.
- Scanlon, G. H., Brinkhous, K. M., Warner, E. D., Smith, H. P., and Flynn, J. E., plasma-prothrombin and bleeding tendency, III, 815.
- Scarborough, E. M., Nissl granules in "fatigued" nerve cells, III, 29.
- Scarborough, H., vitamin-P, III, 924.
- Scarpa, O., occurrence in Abyssinia of rare minerals required for production of corrosion-resisting alloys, I, 287. Necessity for assuming a chemical affinity between solvent and solute, I, 560.
- Scarth, G. W. See Siminovitch, D.
- Scatchard, G., intermolecular action, I, 135. Nature of the critical complex and effect of changing medium on rate of reaction, I, 569.
- Hamer, W. J., and Wood, S. E., isotonic solutions. I. Chemical potential of water in aqueous solutions of sodium chloride, potassium chloride, sulphuric acid, sucrose, carbamide, and glycerol at 25°, I, 80.
- Scatchard, G., Wood, S. E., and Mochel, J. M., vapour-liquid equilibrium. III. Benzene-cyclohexane mixtures, I, 145.
- Scattergood, A. See Pacsu, E.
- Schaaf, F., experimental production of xanthomas in laboratory animals, III, 79.
See also Krupski, J.
- Schaaf, H., and Beumer, A., treatment of pulmonary tuberculosis with lipinsoluble silicic acid, III, 715.
- Schaafsma, A., partition of sulphur dioxide between water and light petroleum, I, 21. Demixing phenomena in hydrocarbons, I, 560.
- Schaare, U., spontaneous diuresis, III, 391. Hæmoglobin during spontaneous diuresis, III, 391. Sodium/chlorine quotient during spontaneous diuresis, III, 391. Relationship between urinary sodium and water excretion, III, 694.
- Schaarschmidt, R. See Gleu, K.
- Schabad, L. M. See Bauer, E. S.
- Schacherl, F., and Běhounek, O., dissociation pressure of copper sulphate pentahydrate and tridehydrate, I, 264.
- Schachparonov, M. I. See Polosin, V. A.
- Schachter, B., and Marrian, G. F., isolation of œstrone sulphate from the urine of pregnant mares, III, 264.
- Schachter, M. See Cornil, L.
- Schachter, R. J., effect of adrenal cortical extract on experimental hyperthyroidism in dogs, III, 260.
and Bebee, M. O., jun., assay of adrenal cortical extract, III, 1051.
- Schade, R., ignition process of the electric discharge at atmospheric pressure, I, 167. Time of establishment of a glow discharge, I, 503.
- Schäfer, A., effect of heat on pituitary gonadotropic hormones, III, 575.
See also Fischer, Hans.
- Schaefer, C. W., physiological conditions which produce wing development in the pea aphid, III, 406.
- Schaefer, E., petrography of the "Laacher trachyte," I, 285.
- Schaefer, F., action of uleron and albugin in gonorrhœa of the uterine cervix during pregnancy, III, 503. Treatment of pain in surgery with dolantin, III, 777.
- Schäfer, H. See Ehrhardt, K.
- Schaefer, Hans, and Schölmerich, P., action current of frog's muscle after monobromoacetic acid poisoning, III, 565.
See also Bracken, H. von.
- Schäfer, K., and Grennerich, H., blood group specificity of thrombocytes, III, 649.
- Schäfer, Klaus, differences in vapour pressures and molecular heats of ortho- and para-hydrogen and deuterium, I, 311. Normal vibrations and the configurations of hydrazine. I. Group theory calculations, I, 511.
See also Eucken, A.
- Schaefer, K. H., treatment of epidemic meningitis with uleron, III, 306.
- Schaefer, R. L., Strickroot, F. L., and Purcell, F. H., endocrine implication of juvenile chondro-epiphysitis, III, 909.
- Schaefer, T., transplantation of liver, III, 271.
- Schaefer, V. J., expansion patterns of protein monolayers on water, I, 22. Effect of ultra-violet light on built-up multilayers, I, 425.
See also Langmuir, I.
- Schaefer, W., specific inhibition applied to the separation of anti-lipin and polysaccharide antibodies of antitubercular sera, III, 334. Antigenic properties of the smooth and rough forms of bovine and of human *B. tuberculosis*; presence of a specific antibody for the proteins of the bovine organism in rabbit's anti-bovine S serum, III, 877. Antigenic structure of human and bovine tubercle bacilli, III, 945. Protein antigen and bovine tuberculin, III, 1013.
and Sandor, G., separation of a protein antibody from the lipin- and polysaccharide-antibody in horse serum prepared from a smooth strain of bovine *B. tuberculosis*, III, 528.
- Schaeffer, E., examination of thrombocytes in dark field, III, 649.
- Schaeffer, W., and Harteck, P., electron and positron spectrum of radioactive arsenic, I, 546.
- Schaffner, A., enzymic synthesis of glycogen, III, 624.
- Schäper, W., allergy and constitution, III, 93.
- Schär, B. See Zeller, E. A.
- Schäer, H., treatment of surgical tuberculosis with rubrophen, III, 715.
- Schaffer, K., cerebellar part of pyramidal tract, III, 667.
- Schaffer, N. K., Ziegler, W. M., and Rowntree, L. G., certain iodine-reducing substances of thymus extract; chemical analysis, III, 39.
See also Rowntree, L. G.
- Schaffer, P. S. See Haller, H. L.
- Schaffstein, G., avitaminosis in orchid seedlings, III, 437.
- Schafmeister, P., and Ergang, R., phase diagram for [the system] iron-nickel-chromium with special reference to brittle constituents produced by long heating, I, 252. The brittle σ -phase in the ternary system iron-chromium-manganese, I, 314. System iron-nickel-tin, I, 518.
- Schahmanéche, F. See Barbier, D.
- Schairer, E., and Krombach, E., deep X-ray damage to the lung. II., III, 717.
See also Hübner, O.
- Schairer, J. F., and Bowen, N. L., system leucite-diopside-silica, I, 201.
- Schales, O., catalytic influence of hæmins and hæmin derivatives on luminescence of 3-aminophthalhydrazide, I, 151. [Factors] influencing luminescence of lucigenin [dimethyldiacridylum nitrate], I, 404. Water-soluble c-hæmin from blood. III., III, 552.
and Behrnts-Jensen, H., ultra-violet absorption by cytochrome-C and by sodium hyposulphite, III, 420.
See also Barkan, G.
- Schallamach, A., X-ray investigation of the structure transition of methane at the λ point, I, 553.
See also Müller, Alex.
- Schaller, P. See Mannich, C.
- Schaller, W. T., johannsenite, a new manganese pyroxene, I, 47. Thaumassite from the Ducktown district, Tennessee, I, 163.
and Fairchild, J. G., cadmium in smithsonite from New Mexico, I, 164.
See also Glass, J. J.

- Schallock, G., case of sprue due to rheumatic stenosing endangitis of thoracic duct and lipid granulomatosis of the mesenteric lymph nodes, III, 851.
- Schalm, L., determination of average diameter of erythrocyte, III, 646.
- Schaltenbrand, G. See Cimbal, O.
- Schalter, H. See Hasley, D. E.
- Schalyl, S. S., anomalous magnetic properties of anhydrous ferrous chloride, I, 247.
- Schamovskii, L. M., and Kapustinskaja, N., content of heavy water in the earth at a depth of 1300 metres, I, 46.
See also Kapustinski, A. F.
- Schams, O., colorimetric micro-determination of aluminium in plant ash, III, 438.
- Schamschurin, A. A. See Lagerev, S. P., and Parfentiev, L. N.
- Schanderl, H., systematics and physiology of [wine] cellar mould *Rhacodium cellare*, Persoon, III, 426.
and Bosian, G., improvements in the Holdheide-Huber-Stocker apparatus for determining carbon dioxide, III, 885.
- Schapiro, E., synthesis of sexual hormone glycuronides, II, 119. Synthesis of steroid glycuronides, II, 218.
- Schapiro, M. J., sodium salt of hexanitrodiphenylamine as a microchemical reagent, I, 98. Sensitive reactions for tantalum and niobium, I, 102.
- Scharavski, S. M., autonomic nervous system in circulatory disturbances, I, III, 456.
- Scharf, J., familial supranuclear ophthalmoplegia and ptosis, III, 466.
- Scharer, E., dark and light cells in brain and in liver, III, 740.
- Scharrer, K., nutrition of farm animals, III, 700.
- Scharrer, L., condensation of super-saturated vapours on ions, I, 503.
- Schartau, O. See Hartmann, M.
- Schartum-Hansen, H., sternal puncture in Gaucher's disease, III, 645.
See also Evensen, O. K.
- Schartz, E. D. See Wirtschatter, Z. T.
- Schatia, V. See Beres, D.
- Schattenberg, H. J. See Ziskind, J.
- Schattenstein, A. I., acid-basic indicators in solvents with different acid-basic properties, I, 522.
and Viktorov, M. M., liquid sulphur dioxide as a solvent for inorganic substances, I, 71.
See also Markova, G. S.
- Schatzki, R., diagnostic roentgenology, III, 937.
- Schauf, E., creatinuria in progressive muscular dystrophy, III, 127.
- Schauffier, C. See Schauffier, G. C.
- Schauffier, G. C., Kanzler, R., and Schauffier, C., management of 256 cases of infection of the immature vagina, III, 612.
- Schaumann, O., chemistry and pharmacology of local anaesthetics, III, 187.
See also Eisleb, O.
- Schavargin, A. I., 4-methylbornylene and its hydration, II, 434.
- Schdanov, H. S. See Iveronova, V. I.
- Schechter, A., heterogeneous recombination of atoms and calculation of the heat of adsorption of atoms on metallic surfaces, I, 608.
- Schechter, A. B. See Buben, N. J., and Kuschnerev, M. J.
- Schechter, M. S., and Haller, H. L., identity of pyrethrosin with chrysanthin and non-identity with geigerin, II, 435.
- Schechtman, A. M., simple inexpensive slide warmer, III, 1. Localisation of the neural inductor and tail mesoderm in a frog egg (*Hyla regilla*), III, 443.
See also Baronofsky, I. D.
- Schedtler, O., gold treatment of pulmonary tuberculosis, III, 779. Gold treatment of tuberculosis and chronic rheumatism, III, 779.
- Scheeline, H. W., and Gilliland, E. R., vapour-liquid equilibrium in the system propane-isobutylene, I, 523.
See also Gilliland, E. R.
- Scheer, B. T., development of concept of tissue respiration, III, 854.
- Scheer, G., eosinophilia in case of cancer of stomach, III, 1026.
- Scheer, K., action of ultra-violet radiation on vitamin-C content of milk, III, 705.
See also Dienst, C.
- Scheer, P. See Strauss, L. H.
- Scheer, W. M. van der, and Kork, H. C., peripheral nerve lesions in cases of pernicious anaemia, III, 465.
- Scheffers, H., effect of electric field on oxygen atoms and water molecules in molecular beam experiments, I, 114.
- Scheggia, E. R. See Gascón, J.
- Scheib, R. See Lawson, A. W.
- Scheibe, G., and Martin, J., application of emission spectroscopy to local micro-analysis, I, 1, 536.
- Schöntag, A., and Katheder, F., fluorescence and propagation of energy with reversible polymerised dyes, I, 452.
- Scheidegger, S., heterotopic bone formation, III, 955.
- Scheie, H. G., and Collins, L. H., jun., use of rabbit antipneumococcus serum in the treatment of ulcer serpents, III, 867.
- Scheil, E., and Glauner, B., Mg-Mg₂Al₂Mg₃Bi₂ section of the magnesium-aluminium-bismuth system, I, 413. Mg-MgZn-Mg₃Bi₂ section of the magnesium-zinc-bismuth system, I, 413.
- Schein, M., Jesse, W. P., and Wollan, E. O., intensity and rate of production of mesotrons as a function of altitude, I, 564.
- Scheinberg, D., response of blood-urea-N, uric acid, and plasma-cholesterol to parenteral liver extract, III, 173.
- Scheiner, H., effect of continuous intravenous acetylcholine on the dog and cat, III, 711. Determination of choline-esterase content of serum or biological extracts, III, 786. Frog's abdominal muscle as a graphical indicator of the choline-esterase hydrolysis of acetylcholine, III, 786.
See also Gautrelet, J., and Tiffeneau, M.
- Scheinker, I., simultaneous occurrence of brain swelling and brain cedema in a case of secondary hypernephroma in the cerebellum, III, 371.
- Scheinkman, E. A. See Tschagovetz, R. V.
- Scheintzis, O. G., micro-volumetric determination of potassium, I, 98. Anthranilic acid as a reagent for the microchemical detection of metals, I, 99. Microchemical detection of cations with the aid of hexanitrodiphenylamine, I, 534.
See also Gapschenko, M. V.
- Schellenberg, H. See Ruzicka, L.
- Scheller, H., and Stroebe, F., fatal hypoglycæmia caused by pancreatic adenoma, III, 380.
- Scheludiakova, E. I. See Fedorov, B. P., and Fedorov, V. R.
- Schemaeve, A. M., discharge in vapours of mercury at pressures above atmospheric, I, 228.
- Scheman, L., Lewin, P., and Soskin, S., pseudohypertrophic muscular dystrophy, III, 244.
- Schemastina, E. V. See Schuikin, N. I.
- Schematenkova, V. T. See Schorigin, P. P.
- Schemjakín, F. M., and Pilitschenko, V. A., reactions of resorcinol with niobium and tantalum salts, I, 102.
and Volkova, V. A., reactions of rare earths and allied elements with polyhydric phenols and alkaloids. VII. Colorimetric determination of cerium with brucine, and the reaction between persulphate and brucine, I, 625.
- Schemjakín, M. M., aldehyde-acids and aldo-enol-lactones. II. Synthesis of γ -lactone of α -dihydroxy- β -phenyl- Δ^{β} -butenoic acid (3-hydroxy-2-keto-4-phenyl-2,3-dihydrofuran). III. Specific properties of γ -aldo-enol-lactones and unsaturated aldehyde-acids, I, 422.
and Reákin, I. A., aldehyde-acids and aldo-enol-lactones. I. Condensation of acetic acid with aldehydes and ketones, II, 439.
- Schempi, J. M. See Nichols, M. L.
- Schenck, G., bitter constituents of sap of *Lactuca virosa*. IV., III, 804.
and Graf, H., bitter constituents of sap of *Lactuca virosa*. VII. Determination of the bitter taste of the bitter principles, III, 932.
- Graf, H., and Schreber, W., bitter constituents of sap of *Lactuca virosa*. V. Isolation of lactucin and lactucopiricin, III, 734.
- Schenck, M., bile acids. LV. and LVI. Gall stone containing lithocholic acid from a pig, III, 150, 915.
- Schenck, R., and Forst, P. von der, equilibrium studies on ore-forming sulphides. II., I, 372.
Hoffmann, I., Knepper, W., and Vogler, H., equilibrium studies on ore-forming sulphides. I., I, 145.
- Schenk, E., thallium poisoning, III, 616.
- Schenk, P., circulatory function in male and female, III, 557.
- Schenk, P. W., and Jablonowski, H., reactions of oxygen atoms, I, 623.
- Schenken, J. R., Stasney, J., and Hall, W. K., lack of anti-anaemic principle in human liver from a case of carcinoma of stomach, III, 812.
See also Burns, E. L.
- Schenker, V. See Selye, H.
- Schepers, G. W. H., corpus callosum and related structures in the South African negro brain III, 246. Blood vascular system of the brain of *Testudo geometrica*, III, 541.
- Scheps, M. See Elmer, A. W.
- Scheremetieva, K. A., effect of X-rays on development of axolotls, III, 543.
and Brunst, V. V., spontaneous tumours in axolotls, III, 489.
- Scherer, H. J., and Collet, L., neuropathology of the dog, III, 670.
See also Bogaert, L. van.

- Scherer, M., Pirani gauge, I, 224. Existence of rectilinear magnetic dichroism in liquids giving wide absorption bands, I, 551.
- Scherer, O., organic fluorine compounds, II, 353.
- Scherf, D., and Schott, A., supernormal phase of recovery in the human heart, III, 820.
- Scherlin, S. M., Braz, G. I., Jakubovitch, A. J., and Konovaltshik, A. I., certain side-chain substituted derivatives of *p*-tolylarsinic acid, II, 565.
- Braz, G. I., Jakubovitch, A. J., Vorobieva, E. I., and Rabinovitch, F. E., hydroxy- and methoxy-derivatives of acridine, II, 126.
- Scherp, H. W. See Branham, S. E.
- Scherrer, J. A., Bell, R. K., and Mogerman, W. D., electro-analytical determination of copper and lead in nitric acid solution containing small amounts of hydrochloric acid, I, 488.
- Scherrer, P., dielectric behaviour of Rochelle salt and related substances, I, 186.
- and Zingg, E., stability of the isobars Cd-In, In-Sn, Sb-Te, Re-Os, I, 591. See also Bantle, W.
- Scherstén, B., two methods of administering oxygen, III, 25. Significance of citrate content of the sex gland secretions in man and animals, III, 385.
- Scheruigin, N. See Bernshtein, A.
- Scherzer, O., the electron in the radiation field, I, 298.
- Schestialtinov, M. S. See Kruilin, A. S.
- Schettler, O. H., Bisbee, R. F., and Goodenough, B. H., use of biophotometer and vitamin-A therapy in industry, III, 514.
- Scheumann, K. H., red gneisses of the Saxon Erzgebirge and adjoining regions, I, 108.
- Scheunert, A., and Wagner, K. H., synergism of vitamins. III. Alleged synergism between vitamin-B₁ and -A, III, 163. Vitamin-A action of [the carotenoids] aphanene and aphanicene, III, 918.
- Scheurenberg, G. See Grüninger, U.
- Scheurer, H. See Gordonoff, T.
- Scheurer, O., and Bauer, Rolf, action of histamine on temperature and vascularisation of human skin, III, 184.
- and Hagenmeyer, H. O., blood sedimentation rate in old age and in generalised arteriosclerosis, III, 1026.
- Scheverdin, N. I., and Kotscheschkov, K. A., reaction of α -methylhydroxylamine with organic compounds of magnesium and lithium, as a method of synthesis of primary amines, II, 247. See also Shitkova, L. A.
- Scheves, G. See Goldstein, B.
- Schevko, A. D. See Tschagovetz, R. V.
- Schiappoli, F., changes in venous pressure in normal subjects due to variations in the venous circulation of reflex, mechanical, or thermal origin, III, 459.
- Schicher, M. G., viscosimeter, I, 281.
- Schiemann, O. See Neufeld, F.
- Schiemann, R. See Reifferscheid, W.
- Schier, W. W. See King, B. G.
- Schievers, J. See Helderweirt, G.
- Schiff, A. See Cooper, Z. K.
- Schiff, L., Rich, M. L., and Simon, S. D., hæmatopoietic principle in the diseased human liver, III, 228.
- Schiff, L. I., and Snyder, H., quadratic Zeeman effect, I, 166.
- Schiffers, B. See Benrath, A.
- Schiffmann, A., and Winkelman, L., liver and serum-phosphatase, III, 758.
- Schiga, T., detoxication of injected peptone by normal rabbits and by rabbits with organic disturbance. I. Behaviour of residual and urea-nitrogen in blood of rabbits poisoned with peptone, III, 996.
- Schild, H. O., histamine release in anaphylactic shock from tissues of guinea-pig, III, 614.
- Schildknecht, C. E. See Rice, F. O.
- Schildknecht, O., hæmorrhagic diathesis and carcinoma of the stomach, III, 549. Digilanid-C, III, 862.
- Schill, E., hair growth following removal of a hypernephroma, III, 581.
- Schilling, J. See Bansi, H. W.
- Schilling, O. See Mannich, C.
- Schilling, W. See Murphy, K. W.
- Schillke, W. See Engelhard, H.
- Schilov, E. A., titration of small volumes, I, 44. Mechanism of halogenation of phenols, II, 543.
- and Judin, F. K., di- and poly-aryl-ethane series. I. Di-*p*-xenyloethanone [*p*-xenyl *p*-xenylmethyl ketone] and its derivatives, II, 324.
- Schimert, J., histological evidence for the neurone concept in the sympathetic nervous system, III, 253.
- Schindler, R., incidence of various types of gastric disease as revealed by gastroscopic study, III, 841.
- and Serby, A. M., gastroscopic observations in pernicious anæmia, III, 447.
- Schinzel, M. See Hertel, E.
- Schinzel, T., and Benoit, G., preparation, stability, and physiological action of heavy-metal salts of dithiocarbamic acids and thiol-acids, II, 250.
- Schmidt, E., blood regeneration in man, III, 226. Blood regeneration in man. IV., III, 546.
- Schiotz, E. H., dental caries and nutrition, III, 764.
- Schipkus, E. See Reichert, W.
- Schirm, M. See Winterfeld, K.
- Schirmer, E. H. See Fantus, B.
- Schirokova, V. N. See Tscherniaev, I. I.
- Schischakov, N. A., and Kasatotschkin, V. I., orientation of surface crystals of brass by abrasion, I, 129. See also Dankov, P. D.
- Schischkin, N., and Pochvalenski, E. D., equilibria in the system H_2SO_4 - $(\text{NH}_4)_2\text{SO}_4$ - H_2O , at 98.3°, I, 264. See also Kobeko, P. P.
- Schischlovski, A., apparatus for luminescence analysis, for qualitative and quantitative purposes, I, 159.
- Schischniashvili, M. E., and Rabinovitch, A. J., coagulation of colloids by electrolytes. XIII. Electrochemical properties and coagulation of unidisperse silver sols. XIV. Electrostatic theory of coagulation and the limits of its applicability to silver sols, I, 610.
- Shitova, Z. I. See Musheev, V. A.
- Schittenhelm, A., and Bauer, J., effect of extirpation of endocrine glands on anaphylactic shock in guinea-pigs, III, 135.
- Schjett-Rivers, E., hyperemesis gravidarum, III, 587.
- Schkljar, N. M., secretory functions of the stomach of domestic birds (chickens, geese) during ontogenesis, III, 62. Effect of varying the ratio of basic to acidic constituents in the food of geese on oxidation processes during embryonic growth. I. and II., III, 72, 162.
- Schlapfer, P., and Lehner, R., system $\text{CaO-P}_2\text{O}_5\text{-NaOH-H}_2\text{O}$, I, 323.
- Schlayer, C., autoxidation of urine and oxygen tension in kidney, III, 759.
- Schlechtweg, H., influence of mechanical strains on ferromagnetic properties, I, 513. See also Stablein, F.
- Schleede, A., and Bartels, B., beginning and cessation of the light process in phosphors. I., I, 124.
- Schlegel, H., anthelmintics containing areca nut, III, 932.
- Schleicher, E. M., determination of erythrocytes from a blood-smear by a "dry chamber" method, III, 1025. See also Sharp, E. A.
- Schleicher, I. See Hochrein, M.
- Schleining, T. See Kestermann, E.
- Schlemmer, F., and Gemp, A., alkaloids of *Sanguinaria canadensis*, II, 41.
- Schlenk, F., Euler, H. von, and Gunther, Gunnar, deaminocozymase, III, 424. Action of phosphatase on cozymase, III, 424. See also Euler, H. von.
- Schlenk, H. See Wieland, H.
- Schlenker, H. See Abderhalden, E.
- Schlesinger, E. R., and Mitchell, W. L., sulphamidale eruption: study of patients with morbilliform rash and their subsequent reactions, III, 1083.
- Schlesinger, H. I., Flodin, N. W., and Burg, A. B., hydrides of boron. XII. α -Dimethyldiborane and methyl derivatives of borine trimethylamine, II, 303.
- Sanderson, R. T., and Burg, A. B., volatile compound of aluminium, boron, and hydrogen, I, 210. See also Brown, H. C.
- Schlesinger, M., carcinoma cells in thoracic and in abdominal fluids, III, 991. See also Derow, H. A.
- Schlesinger, N. A., Feigelson, I. B., and Spiriagina, A. I., solubility of sodium borates in saturated solutions of sodium chloride in presence of magnesium sulphate, I, 21.
- Zorkin, F. P., and Novoshenova, L. N., distribution of bromine between crystals and solutions of potassium chloride and bromide, I, 253.
- Schlicke, C. P., effect of normal and abnormal human gastric juice, administered to the mother, on blood of new-born rats, III, 547.
- Schlienz, G. See Moers, H.
- Schlierbach, P., fate of indican in the organism and its elimination by the kidneys, III, 486.
- Schligin, A., and Erschler, B., platinum electrode. VII. VIII. Effect of poisoning on the capacity of the platinum electrode, I, 613.
- Schlivitch, S., sensitisation of reversible photovoltaic cells, I, 267.
- Schlivitsch, B., and Kozintzev, A., morphology of visceral branches of pudendal plexus (nn. pelvici) in man, III, 1021.
- Schlomka, G., respiratory arrhythmia in silicosis, III, 17. Electrocardiogram in silicosis, III, 558. Arteriosclerosis, III, 562.
- and Bruns, H., relation of left and right axis preponderances in the electrocardiogram, III, 360.
- and Cramer, H., respiratory arrhythmia and ectopic beats, III, 745.

- Schlomka, G., and Dressen, M., respiratory variations of Q_3 [in the electrocardiogram], III, 455.
- and Königs, G., duration of electric systole in myocardial disease, III, 455.
- and Neuking, P., respiratory arrhythmia in labile circulation, III, 455.
- and Overlack, P., respiratory arrhythmia in hypertensive patients, III, 17.
- and Witsch, F., relative duration of systole in adipose subjects, III, 455.
- Schlossmann, H. See Blaschko, H., and Lehmann, H.
- Schlottmann, H. See Euler, H.
- Schludermann, K., tissue culture of epithelium of choroidal plexus of the chick, III, 445.
- Schlüchterer, (Miss) E. See Peat, S., and Stacey, M.
- Schlüpmann, K. See Drigalski, W. von.
- Schlüter, W. See Vogel, R.
- Schlutz, P. W., and Knott, E. M., use of honey as a carbohydrate in infant feeding, III, 71. Vitamin- B_1 content of evaporated milk, III, 1070.
- Oldham, H., and Morse, M., effect of vitamin- B_1 on iron retention of normal infant, III, 1069.
- See also Thomas, J.
- Schmael, N. G., palladium carbide, I, 428.
- Schmaufuss, K., "second growth" of potato tubers, III, 635.
- Schmaltz, D., detection of peroxidases in plants and their stability in pharmaceutical preparations, III, 517.
- Schmatolla, G. See Kraut, H.
- Schmedeman, O. C., chemistry of ore solutions, I, 286.
- Schmeil, M. See John, W.
- Schmeiser, K., releasing radiation for hard showers, I, 400.
- Schmeiss, H. See Kröhnke, F.
- Schmelkes, F. C., and Joiner, R. R., synthesis of 1-6-amino-5-pyrimidyl methyl-2-methyl-2-methyl-3- β -hydroxyethylpyridinium bromide hydrobromide, II, 522.
- Schmengler, F. E., Takata reaction in pulmonary tuberculosis, III, 795.
- Schmid, E., duration of passive immunity following sensitisation, III, 203.
- Schmid, E. H. See Erlenmeyer, H.
- Schmid, G., and Rommel, O., rupture of macro-molecules by ultrasonic waves, I, 621.
- Schmid, H., vitamin-D and syntheses in this group, III, 404.
- See also Klein, Wilhelm.
- Schmid, H. E., histophysiology of insulin, III, 141.
- Schmid, L. [with Lenzer, T., and Blum, E.], amber. VI. Acids occurring in amber, II, 438.
- and Hosse, W., amber. V., II, 437. Constituents of poppy flowers, III, 538.
- and Lang, R., colouring matters of potato tubers afflicted with yellow spots, III, 952.
- and Polaczek-Wittek, A., diffusion of glycogen in liquid ammonia, I, 417. Flower pigments of *Potentilla tormentilla*, III, 884.
- Schmid, N., blood and bone marrow smear count in brucellosis, III, 446.
- Schmid, O. See Reichel, L.
- Schmid, R., linking energy of the carbon atom, I, 455.
- See also Gero, L.
- Schmid, T., electric quadrupole moment of the iodine nucleus, I, 447.
- Schmidt, A. W., Hopp, G., and Schoeller, V., chemical constitution and viscosity, with reference to aromatic hydrocarbons with long side-chains, I, 135.
- Schmidt, C. F. See Forbes, H. S.
- Schmidt, C. L. A. See Tarver, H.
- Schmidt, C. R. See Bachrach, W. H., and Beazell, J. M.
- Schmidt, E. G., reaction between amines and sodium 1:2-naphthaquinone-4-sulphonate, II, 195. Determination of sulphapyridine in blood, III, 711. Determination of sulphanilamide in blood, III, 859.
- Schmidt, E. R., rapid control of intracranial pressure, III, 253.
- Schmidt, E. W., and Kirchhoff, H., chlorophyll in sugar beet and mangolds, III, 537.
- Schmidt, F. C., Studer, F. J., and Sottysiak, J., heats of solution and heats of reaction in liquid ammonia. V. Alkali and alkaline-earth metals, I, 28.
- Schmidt, Georg, effects of withdrawal of luminal, III, 185.
- Schmidt, Gerhard, and Levene, P. A., ribonucleodepolymerase (Jones-Dubos enzyme), III, 325.
- Pickels, E. G., and Levene, P. A., enzymic dephosphorylation of deoxyribonucleic acids of various degrees of polymerisation, III, 325.
- Schmidt, Günther, histopathology of fat metabolism in diabetes mellitus, III, 581.
- See also Cori, G. T.
- Schmidt, G. A., speed of determination for developing neural folds, III, 543.
- Schmidt, H., structure of muscularis mucosæ of fundus of pig, III, 1024.
- Schmidt, H. (Berlin). See Euler, H.
- Schmidt, H. (Texas). See Pearson, P. B.
- Schmidt, H. (Zürich), analysis of the reflex-tonic vagus action on respiration, III, 461.
- Schmidt, Harry, enol acylates, II, 6.
- and Schulz, L., spatial isomerism in the fenchol series, II, 169.
- Schmidt, H. L., jun., and Sydenstricker, V. P., nicotinic acid in the prevention of pellagra, III, 74.
- Schmidt, H. W., heterotransplantation of tumour tissue, III, 280.
- Schmidt, I. G., changes in genital tracts of guinea-pigs associated with cystic and "interstitial gland" ovaries of long duration, III, 262. Influence of normal ovary on formation of typical irradiation tissues in X-rayed ovary, III, 585.
- and Schmidt, L. H., variations in structure of adrenals and thyroids produced by thyroxine and high environmental temperatures, III, 40.
- See also Schmidt, L. H.
- Schmidt, J. D. E., experimental thrombosis in the dog, III, 10.
- Schmidt, K. H. See Krabbe, W.
- Schmidt, L. H., and Hilles, C., sulphapyridine in experimental pneumococcus infections, III, 1082. Sulphapyridine: immunity to reinfection with type I pneumococcus, III, 1082.
- and Hughes, H. B., absorption and excretion of sulphapyridine, III, 999.
- and Remsen, D. B., bile salt solutions in infections with β -haemolytic streptococci, III, 859.
- and Schmidt, I. G., relation of environmental temperature to action of thyroxine, III, 40.
- See also Hilles, C., and Schmidt, I. G.
- Schmidt, M. B. See Robbins, W. J.
- Schmidt, Otto (Bonn), hæmoglobin-methæmoglobin redox system, III, 551.
- Schmidt, Otto (Ludwigshafen), characterisation of simple and carcinogenic aromatic hydrocarbons through the density distribution of valency electrons; (B-electrons). II, I, 183.
- Schmidt, O. T., and Simon, Alfred, extent of validity of optical rotation rule in sugars. I. α -Methyl-D-arabonic acid, II, 242.
- Schmidt, P. See Pfeiffer, P.
- Schmidt, R., insulin shock and the eye, III, 831.
- Schmidt, Rudolf. See Marchionini, A.
- Schmidt, influence of electric quadrupole moments on the Paschen-Back hyperfine structure effect and the structure of the mercury line 2537 Å., I, 112. Quadrupole moment and magnetic moment of the ^{127}I nucleus, I, 290. Hyperfine structure of the iodine spectrum, I, 543.
- Schmidt, W. (Jena), formation of lymph node metastases in mice ascites carcinoma, III, 847.
- See also Sturm, A.
- Schmidt, W. (Kiel), liver function and treatment with sulphanilamides, III, 927.
- See also Vonkennel.
- Schmidt, W. J., polarisation-optical analysis of protein-lipin systems, illustrated by the outer cells of the retina, III, 195.
- Schmidt, W. M., and Lippard, F. W., human passive transfer antibody. III. Serial titrations on treated and untreated patients with hay fever. III, 1091.
- See also Lippard, F. W.
- Schmidt-Glenewinkel, H., magnetic measurements with long rods of considerable cross-section of steel and the newer alloys, I, 514.
- Schmidt-Thomé, J. See Butenandt, A.
- Schmidtgall, E. See Jakób, W. F.
- Schmidu, K., anaemia. I. and II., III, 6.
- Schmieder, K., stopping power of, and ion formation by, α -rays in gases, I, 441.
- Schmitt, F. (Innsbruck). See Lindner, J.
- Schmitt, Frida, and Lossie, H., clinical experiences with strophosid, III, 777.
- Schmitt, Fritz, angularity of granite quartz, I, 438.
- Schmitt, F. O., ultrastructure of protoplasmic constituents, III, 740.
- and Bear, R. S., ultrastructure of the nerve axon sheath, III, 244.
- Schmitt, J. See Dane, (Frl.) E.
- Schmitt, L., and Breitwieser, W., apparatus for spectrographic determination of potassium in plant ash from Neubauer tests, III, 341.
- Schmitt, O. H., measurement of nerve impulse velocity, III, 244. Monophasic action potentials from undamaged nerve, III, 568.
- See also Downing, A. C., and Katz, B.
- Schmitt, W. See Wieland, H.
- Schmittner, H., influence of polishing dust on the teeth of precious stone polishers, III, 782.
- Schmitz, A., tryptic system of plasma. III. Inhibitor of tryptic action present in blood, III, 119.
- Schmitz, H., and Schumacher, H. J., homogeneous catalytic formation of mono- and di-vinylacetylene from acetylene, I, 478.
- Schmitz, Heinrich. See Mischeel, F.

- Schmitz, Henry, and Kaufert, wood decay. VIII. Effects of addition of glucose, and glucose with asparagine, on rate of decay of Norway pine sapwood by *Lenzites trabea* and *Lentinus lepideus*, III, 108.
- Schmitz, W., and Wiebe, W., mechanical stimulation of nerve, III, 465.
- Schmitt-Dumont, O., polymeric forms of silver cyanide, I, 187. Polymerisation and copolymerisation of phosphonitrile chlorides, I, 623.
- and Horst, J. ter, constitution of triindole, II, 346.
- Schmuk, A., and Kostov, D., chromosome doubling in rye and wheat induced by bromoaceneaphthene and bromonaphthalene, III, 883.
- Schmutz, D. See Sartory, A.
- Schnedorf, J. G., and Ivy, A. C., examination of hypnotoxin theory of sleep, III, 750. Effect of tobacco smoking on alimentary tract, III, 757.
- Schnee, M. S. See Tschirkov, S. K.
- Schneider, A. K. See Bradsher, C. K.
- Schneider, B. See Flexner, M.
- Schneider, C. L. See Thimann, K. V.
- Schneider, D., and Springorum, P. W., effect of padutin on the circulation, III, 458.
- Schneider, E. See Bohme, H.
- Schneider, Erich, action of vitamin-E on relationship between ovaries and thyroid gland, III, 706.
- See also Bomskov, C., and Widenbauer, F.
- Schneider, E. E., Goodeve, C. F., and Lythgoe, R. J., spectral variation of photosensitivity of visual purple, I, 301.
- Schneider, F., and Foulke, D. G., micro-technique of organic qualitative analysis, II, 194.
- Schneider, G., the Lehmann-Facijs test [in schizophrenia and cerebral diseases], III, 373.
- Schneider, G. (Lausanne). See Delachaux, A.
- Schneider, H., and Steenbock, H., low-phosphorus diet and response of rats to vitamin-D., III, 605.
- Schneider, J. Z., and Willert, K., influence of sucrose on food value. I.—V., III, 917. Hypervitaminosis-C in the rabbit, III, 921.
- Schneider, L. A., development of the superior caval system in the rat, III, 442.
- Schneider, O., pharynx of the new-born, III, 641.
- Schneider, R., and Droller, H., ketosis and acidosis in diabetic coma, III, 709.
- Schneider, R. F. See Wright, I. S.
- Schneider, W., muscles of upper urinary passages, III, 641.
- See also Peukert, L.
- Schneider, W. A. See Waldman, B.
- Schneider, W. K. See Young, G. H.
- Schneider-Horn, W. H., origin, treatment, and prophylaxis of varicose veins, III, 563.
- Schneiderbauer, A., new mercurial diuretic, esidron "Ciba," III, 86. Secondary pernicious anaemia, III, 742. Gold treatment of pulmonary tuberculosis, III, 779.
- Schneiderhohn, H., and Kaytzh, E., copper ore deposits. I. The Hosenberg mining area, I, 438.
- Schneijerson, S. S., and Grabar, P., ultra-filtration of the haemolysin of *B. perfringens*, III, 876.
- Schnetz, A. See Grumbach, A.
- Schnetz, H., hypovitaminoses and gastrointestinal disturbances, III, 600.
- Schnücke, R., progress of chemotherapy, with special reference to bacterial infections, III, 775.
- Schnur, S. See Gubner, R.
- Schnurmann, R., determination of pore size of [porous] ceramic and glass filters with air-liquid and liquid-liquid systems, I, 368. Anti-foaming devices, I, 434.
- Schober, H., isotope displacement in the neon spectrum, I, 165.
- Schoch, A., sheep pox infection in man, III, 1104.
- Schoch, W., experimental rickets in pigs, III, 77.
- Schocke, H. See Lauber, H. J.
- Schocken, K., validity of Einthoven's triangle rule, III, 745.
- See also Beck, W. A.
- Schöberl, A., and Krumey, F., differences in reactivity of thiol and disulphide-groups in organic compounds, II, 11.
- and Rambacher, P., hydrolytic fission of the disulphide linking in cystine derivatives, glutathione, and insulin, II, 204.
- Schöllner, R. See Wenusch, A.
- Schoeller, P. See Schmidt, A. W.
- Schoeller, W. R., stannous chloride as quantitative reagent for selenium and tellurium, I, 384.
- Schölmerich, P. See Schaefer, Hans.
- Schölzke, K. H., action of artificial pyrexia on uleron-fed pigeons, III, 711.
- Schön, M., metastable character of the "anlagerung" points in crystalline phosphors, I, 509.
- Schoen, Marcel. See Lacassagne, A.
- Schön, O. See Dane, (Frl.) E.
- Schoen, R., effect of ectromelia virus in malignant neoplasms, III, 1064.
- Schoenaers, F. See Goidsenhoven, C. van.
- Schönberg, A., degradation reaction in organic chemistry, II, 49, 142.
- and Azzam, R. C. [with Michaelis, R.], reactive methylene groups and nitroso-compounds; abnormal action of acids on 1:2:3-triketones, II, 509.
- and Barakat, M. Z., organic compounds of sulphur. XXVI. New method for the preparation of tetra-arylethylene sulphides, II, 454.
- and Moubacher, R., photo-reactions. IV. Photo-reaction between phenanthraquinone and aromatic aldehydes; a new passage from phenanthraquinone to fluorenone, II, 514.
- and Warren, Frank L., synthesis of phenanthrenes, II, 152.
- Schönberg, M., β -ray selection rules and the meson theory, I, 595.
- Schoenborn, H. W. See Hall, R. P.
- Schönbrunner, E. See Raab, A.
- Schöne, G., congenital heart disease, III, 744.
- Schoene, H., chologogue action of derivatives of *p*-tolylmethylcarbinol and ferulic acid, III, 932.
- Schoeneck, H. See Steiner, K.
- Schoenewald, G., possible fallacies in chest-lead electrocardiograms, III, 122.
- Schönfeld, C. See Bredereck, H.
- Schoenheimer, R., Foster, G. L., and Rittenberg, D., protein metabolism. V. Utilisation of ammonia for amino-acid and creatine formation in animals, III, 405.
- and Ratner, S., protein metabolism. III. Synthesis of amino-acids containing nitrogen, II, 144.
- Schoenheimer, R., Ratner, S., and Rittenberg, D., protein metabolism. VII. Metabolism of tyrosine, III, 405. Continuous deamination and reamination of amino-acids in proteins of normal animals, III, 706.
- and Rittenberg, D., protein metabolism. I. Application of isotopes to the study of protein metabolism; normal abundance of nitrogen isotopes in amino-acids. VI. Hippuric acid formation studied with the aid of the nitrogen isotope, III, 405.
- Rittenberg, D., Foster, G. L., Keston, A. S., and Ratner, S., application of the nitrogen isotope ^{15}N for the study of protein metabolism, III, 405.
- Rittenberg, D., and Keston, A. S., protein metabolism. VIII. Activity of the α -amino-group of histidine in animals, III, 405.
- See also Keston, A. S., Rittenberg, D., and Vickery, H. B.
- Schönherr, F. See Rössler, F.
- Schönheyder, prothrombin in chickens, III, 9. Biological assay of extract of male fern, III, 734.
- Schoening, H. W., Giltner, L. T., and Shahan, M. S., equine encephalomyelitis produced by inoculation of human encephalitis virus, III, 105.
- Schonleber, K., mineralisation of manganese by the plant cell membrane, III, 532.
- Schönmann, W., the diploid bastard *Triton palmatus* $\varnothing \times$ *Salamandra* III, 225.
- Schöntag, A. See Scheibe, G.
- Schopf, C., Becker, Erich, and Reichert, A., hydrolysis of pterins by acids, II, 392.
- Gottberg, K. von, and Petri, W., thebaine-maleic anhydride, thebainequinone, thebainequinol, and the product, flavothebaine, of its isomerisation by acid, II, 41.
- and Kottler, A., xanthopterin, II, 392.
- Kottler, A., and Reichert, R., allantoin as a cleavage product of pigments from Pieridae, III, 845.
- and Ross, F., constitution of usnic acid, II, 82.
- and Thierfelder, K., synthetic experiments in the benzylisoquinoline series. III. Laudanosine 3:7-dimethyl ether from laudanosine, II, 129.
- Schoepfle, G. See Harvey, E. N.
- Schörcher, F., blood transfusion, transfusion apparatus, and blood substitutes, III, 1023.
- See also Dyckerhoff, H.
- Schottler, W. H. A., venoms of *Uroperla latasti* and *U. lebetina*, III, 278.
- Schofield, F. H. See Powell, R. W.
- Schoger, A., deproteinisation in Folin and Wu's method, III, 953.
- Scholder, R., and Hendrich, G., behaviour of filter materials towards concentrated alkalis, I, 161. System $\text{ZnO}-\text{Na}_2\text{O}-\text{H}_2\text{O}$, I, 264.
- Schollmeyer, influence of papainase-activating substances on bacterial gelatin splitting, III, 201.
- Scholten, W. See Meerman, P. G.
- Scholtis, K., micro-determination of calcium in serum and serum ultra-filtrates, III, 453.
- Scholz, C. See Miescher, K.
- Scholz, J. See Frommelt, E.
- Scholz, J., toxicology of solvents used for medicinal purposes, III, 779. New instruments and apparatus, III, 952.

- Schomaker, T. P. See Meherin, J. M.
- Schomaker, V., and Pauling, L., electron diffraction investigation of the structure of benzene, pyridine, pyrazine, butadiene-1,3, cyclopentadiene, furan, pyrrole, and thiophen, I, 458.
- See also Stevenson, D. P.
- Schonberg, determination of metaldehyde, II, 463.
- Schooley, J. P., hypophysectomy of pigeons, III, 1044.
- and Riddle, O., morphological basis of pituitary function in pigeons, III, 45.
- Schoop, G., apparatus for taking blood from guinea-pigs, III, 890.
- Schoorl, N., determination of sodium, I, 216. Determination of glycerol, II, 397.
- Schopfer, W. H., is the factor *M* of the Mucorinase identical with the hormone producing meristematic cell division or growth? III, 327. Specificity of aneurin for micro-organisms; action of a homologue of aneurin, III, 425. Symbiosis and growth factors, III, 425.
- and Moser, W., concentration and separation of the growth factors for micro-organisms contained in wheat germ, III, 219.
- Schopp, W. T., pregnancy and leukæmia, III, 891.
- Schopper, E., photographic investigation of atomic nuclear processes of ultra-radiation, I, 508.
- See also Eggert, J., and Schopper, E. M.
- Schopper, E. M., and Schopper, E., energy-rich nuclear process of ultra-radiation, I, 116.
- Schorigin, P. P. and Bogdanova, A. V., synthesis of *p*-methylbenzyl acetate from toluene, II, 155.
- and Makarova-Semljanskaja, N. N., transition from carbohydrates to carbocyclic compounds. I. Transformation of glucose into phenol, II, 534.
- Makarova-Semljanskaja, N. N., Bilenko, R. L., Derevitzkaja, V. A., and Schematenkova, V. T., ethers of starch, II, 246.
- and Rimaschevskaja, J. A., ethers of cellulose with glycerol. II, II, 247.
- and Schorigina, N. V., case of polymerisation of substituted styrenes in relation to their structure. II, II, 538.
- Simanovskaja, A. A., and Bogdanova, A. V., synthesis of heliotropin [3:4-methylenedioxybenzaldehyde] from pyrocatechol, II, 266.
- and Toptschiew, A. V., nitration by means of nitrogen peroxide. III. Aromatic hydrocarbons. IV. Phenols and aromatic amines, II, 254, 258.
- Schorigina, N. V. See Schorigin, P. P.
- Schorlemmer, W. See Beck, H.
- Schormüller, J., occurrence of vitamin- (lactoflavin). I. Vitamin-B₆ in muscle. II. In organs. III. In nutrient yeasts and yeast-vitamin extracts, III, 287, 495, 703.
- Schorn, E. J., action of alkaline hypobromite on aloin, II, 221.
- Schorn, J. See Skraup, S.
- Schott, A., four-lead electrocardiograms taken shortly before and after coronary occlusion, III, 455.
- See also Scherf, D.
- Schott, G. A., theory of radiation, I, 352.
- Schott-Lvova, E. A., and Sirkin, J. K., dipole moments of organic molecules containing oxygen, I, 405.
- Schotterer, A., sterility in the bitch, III, 478.
- Schottky, W., semi-conductor theory of the boundary layer, I, 60. Statistics and thermodynamics of the state of disorganisation in crystals, especially at low order of deficiency, I, 131. Semi-conductor theory of barrier-layer and point contact rectifiers, I, 544.
- Schotz, S. See Meyer, N. E.
- Schour, I., Smith, M. C., and Hoffmann, M. M., effect of vitamin-A deficiency on rate of apposition of dentine, III, 400.
- Schousboe, J., Krogh's precision syringe for rapid sp. gr. measurement of serum as an indicator of protein content, III, 893.
- Schouteden, F. L. M. See Litschitz, I.
- Schouten, J. F., perception of subjective tones, III, 255.
- and Ornstein, L. S., measurements on direct and indirect adaptation by means of a binocular method, III, 675.
- Schoutissen, H. A. J., tetrazotisation of *o*-phenylenediamine, II, 209.
- Schouwenburg, K. L. van. See Johnson, F. H.
- Schovane, B., Stolz, J., and Zadina, R., toxicity of mandelic acid, III, 780.
- Schpak, V. I., appliance for use with tapless burettes, I, 104.
- Schpilev, F. S., citric acid compounds of zinc, II, 533.
- Schrade, W., action of follicle hormone on bone marrow, III, 446, 645. Routes of absorption of fats and lipins; role of the lungs in fat and lipin metabolism, III, 771. Changes in lipin content of blood in capillaries of extremities, III, 817.
- Schrader, A. See Hanemann, H.
- Schrader, G. A. See Prickett, C. O.
- Schraep, M. See Kollath, W.
- Schraiber, M. G., circulatory disturbances in experimental traumatic shock, III, 364.
- Schramm, G. See Mamoli, L.
- Schramm, J., magnetic susceptibility of [binary] systems of zinc with nickel, cobalt, and iron, I, 17.
- See also Heike, W.
- Schramm, R., treatment of diabetes mellitus with deposulin, III, 51.
- Schrank, A., treatment of diabetes mellitus with depot insulin, III, 140.
- Schratz, E. See Beiler, A.
- Schreiber, W. See Schenck, G.
- Schreck, W. See Plattner, P. A.
- Schreckeneder, R. See Lock, G.
- Schrecker, A. See Kubiczek, G.
- Schreffler, C. B. See Dimick, M. K.
- Schreiber, B. See Koch, C.
- Schreiber, E. See Heubner, W.
- Schreiber, F., apnoea of the newborn and associated cerebral injury, III, 125.
- Schreiber, F. W., large-size extractor for liquids, I, 493.
- Schreiber, G. See Koch, C.
- Schreiber, H., structure and emptying mechanism of gall bladder, III, 485.
- and Riess, O., changes in connective tissue cells from late embryonic to adult stages, III, 1024.
- Schreier, J. A. See Civin, H.
- Schretzenmayr, V., blood-sugar and cerebrospinal fluid-sugar during insulin shock treatment of schizophrenia, III, 35.
- Schreus, H. T., relations of idiosyncrasy and anatomical structure of the epidermis, III, 93.
- and Hüllstrung, H., skin reactions in rheumatism, III, 417.
- Schricker, J. A., and Dawson, P. R., improved molybdenum-blue reagents for determination of phosphorus and arsenic, I, 277.
- Schriek, W., sucrose media for isolation of pathogenic organisms from stools, III, 880.
- See also Haag, F. E.
- Schrire, I., and Sharpey-Schafer, E. P., inhibition of pituitary activity in acromegaly by oestradiol benzoate and testosterone propionate, III, 258. Pituitary control of creatine and creatinine excretion, III, 474.
- Schrire, V., effects on plasma-inorganic phosphate of (II) insulin, (III) adrenalin, in hypophysectomised *Xenopus laevis*, III, 1050.
- and Zwarenstein, H., changes in plasma-inorganic phosphate associated with endocrine activity in *Xenopus laevis*, III, 14.
- Schröcksnadel, H. See Brücke, E. T., and Richter, Hans.
- Schroeder, C. F., pelvic sympathetic surgery for the relief of bladder pain, III, 570.
- See also Scott, W. J. M.
- Schröder, C. G. See Fischer, Hans.
- Schroeder, E. F., Collier, V., jun., and Woodward, G. E., simplified isolation of glutathione from yeast, III, 942.
- and Woodward, G. E., titrimetric modification of the glyoxalase method for the determination of reduced glutathione, II, 464.
- Schroeder, E. M., and Barton, L. V., germination and growth of rock garden plants, III, 533.
- Schroeder, H., vitamin-C requirements of adults, III, 288. Case of enterogenous beri-beri, III, 495.
- and Benacchio, L., vitamin-B₁ metabolism in health and disease, III, 601.
- and Liebhich, H., absorption of vitamin-B₁ and -C from the small and large intestine, III, 286.
- and Wolpert, K., proteolytic activity of pepsin-hydrochloric acid and new enzyme preparations, with special reference to their activation by vitamin-C, III, 1009.
- See also Papayanopoulos, G., and Stepp, W.
- Schroeder, H. A., and Steele, J. M., abnormalities of the urinary tract in "essential hypertension," III, 22.
- Schroeder, M. P. See Beck, W. A.
- Schroeder, R. A., application of plant hormones to tomato ovaries, III, 802.
- Schröder, W., Congo-red test in carcinoma, III, 700.
- See also Böhmig, R.
- Schröder, Wilhelm [with Beckmann, U., and Ausel, W.], relationship of beryllium to vitriol-forming group and alkaline-earth metals. VI. IV. Double-salt formation between ammonium and beryllium sulphate in comparison with that of the vitriols. II, I, 372.
- [with Kleese, W.], relationship of beryllium to vitriol-forming group and alkaline-earth metals. IV. III. Double-salt formation between potassium and beryllium sulphates in comparison with that of the vitriols; (polytherms of the ternary system BeSO₄-K₂SO₄-H₂O between 0° and 100°), I, 27.

- Schröder, Wilhelm [with Schwedt, H.], relationship of beryllium to vitriol-forming group and alkaline-earth metals. V. IV. Double salt formation between ammonium and beryllium sulphates in comparison with that of the vitriols. I, 1, 81.
- Schrödinger, E., nature of the nebular red shift, I, 589.
- Schröer, E., chemiluminescent reactions of sulphur, I, 180. Decomposition of deuteriohalic acid in heavy water, I, 204. Representation of viscosity of binary gas mixtures by the gas-kinetic mixture formula, I, 411.
- Schropp, W., supply of iron to plants in water cultures, III, 338.
- Schtern, E. A. See Kresling, E. K.
- Schtscheglova, C. N. See Joffe, J. S.
- Schtscherbak, M. M. See Valiaschko, N. A.
- Schtscherbakov, A. A., and Markov, B., electrical conductivity of molten system $KCl-MgCl_2$ in region of possible existence of compound $2KCl, MgCl_2$, I, 522.
- See also Schtscherbakov, I. G.
- Schtscherbakov, A. P., physiological role of indispensable "trace" elements for plants, III, 731.
- Schtscherbakov, I. A. See Batalin, A. C.
- Schtscherbakov, I. G., Schtscherbakov, A. A., and Markov, B., polarisation e.m.f. in electrolysis of fused carnallite, I, 325.
- Schtschitkov, V. K. See Tilitschev, M. D.
- Schtscholkin, K. I., detonation of mixtures of pentane and hexane with air in tubes, I, 326.
- Schtschupak, N. B., elimination of metabolites in circulatory insufficiency, III, 459.
- Schub, N. S., macro-micro-burette, I, 44.
- Schube, P. G., Myerson, A., and Lambert, R., effect of benzedrine, benzedrine and atropine, and atropine on the gall bladder, III, 485.
- and Prescott, B. D., effect of copper and iron on the secondary anaemia of therapeutic malaria in general paresis, III, 350.
- See also Alexander, L.
- Schubert, A. See Glau, K.
- Schubert, M. P., combination of cysteine with sugars, II, 535.
- See also Michaelis, L.
- Schuberth, gold treatment of tuberculosis and chronic rheumatism, III, 779.
- Schuchovitski, A., theory of adsorption from solutions, I, 254.
- See also Mamotenko, M.
- Schuck, F., constitution of adolescent child; research on individual corrective work in schools, III, 716.
- Schübel, K., pharmacology of chlorogenic acid, III, 189.
- Schülein, F. See Heupke, W.
- Schüler, H., and Gollnow, H., isotope of lutecium, I, 169. Mechanical, magnetic, and quadrupole moments of the rare ^{178}Lu nucleus, I, 440.
- Gollnow, H., and Haber, H., processes of molecular formation with and without Boltzmann distribution and the conversion of translational into rotational energy, I, 177. Explanation of the phenomenon characterised as "pressure effect" in the spectrum of aluminium hydride, I, 177. Explanation of intensity distribution in the spectrum of aluminium, I, 448.
- Schuler, H., and Haber, H., energy transfer by elementary collision processes, I, 393.
- and Korscheing, H., magnetic moment of ^{171}Yb and isotope displacement of Yb I, I, 112.
- Roig, and Korscheing, H., mechanical moment of ^{171}Yb , quadrupole moment of ^{176}Yb , and relative abundance of ^{173}Yb to ^{171}Yb , I, 112.
- Schüller, relation of weights of bones to meat in cattle, III, 278.
- Schürmann, H. M. E., lawsonite from Cuba, I, 392.
- Schütt, H. See Kuhlmann, F.
- Schuette, H. A. See Gloyer, S. W.
- Schütz, E. See Lueken, B.
- Schütz, H. J., chronaximetric studies before and after work on lead workers and workers out of contact with lead, III, 1093.
- Schütze, H., chemotherapy in plague infection, III, 503. *B. pestis* antigens as prophylactic agents, III, 1101. Prophylactic inoculation during the incubation period, III, 1104.
- Schuffner, W., Snijders, E. P., and Walch-Sorgdrager, B., effect of continued subinoculation of yellow fever virus and its longevity in a preserved state, III, 432.
- Schuhecker, K., ignition of phosphate precipitates in the classical determination of magnesium and phosphoric acid as magnesium pyrophosphate, I, 276.
- Schuhmann, S. See Teele, R. P.
- Schukin, N. I., and Bunina, V. I., catalytic hydrogenation of the furan ring by the continuous method, II, 122.
- Schemastina, E. V., and Tscherkasova, E. D., synthesis of γ -oxides by catalytic hydrogenation of the furan ring, II, 122.
- Schukin, V. See Petrov, A. D.
- Schulek, E., and Floderer, I., colorimetric determination of ferrous and ferric iron in presence of aluminium, manganese, zinc, mercury, copper, phosphoric acid, or of organic substances, with special regard to medicinal preparations, I, 536.
- and Rózsa, P., *p*-ethoxychrysoidine, a particularly suitable general indicator for acidimetry and alkalimetry, oximetry (cerate, permanganate, and bromate), and argentometry, I, 95.
- Rózsa, P., and Szily, M. von, determination of free iodine and iodide-iodine together, I, 95.
- Schulemann, W., significance of dyes in experimental therapy of infectious diseases, III, 306. Principles of drug treatment of tropical infections, III, 867.
- Schuler, B. See Rennkamp, F.
- Schuler, W. A., effect of p_{H_2} on tonus and adrenaline reaction of isolated mesenteric and diaphragmatic arteries, III, 458.
- Schulgina, M. N. See Belopolski, A. P.
- Schulman, J. H., and Stenhagen, E., molecular interaction in monolayers. III. Complex formation in lipid monolayers, I, 256.
- and Teorell, T., boundary layer at membrane and monolayer interfaces, I, 22.
- See also Cockbain, E. G.
- Schulte, A. See Martini, P.
- Schulte, F. H. See Rix, E.
- Schulte, K. See Mannich, C.
- Schulte, M. See Rheinboldt, H.
- Schulte, M. J., identification reactions on isaceen [diacetyldihydroxyphenylisatin], II, 520.
- Schulte, T. L., bacteriology of the urinary tract, III, 727.
- See also Hammer, H. J., and Thompson, L.
- Schulte, W., convulsion treatment of schizophrenia with azoman, III, 832.
- Schulten, H. See Hieber, W.
- Schultz, A. H., relative weight of the testes in primates, III, 441.
- See also Krogman, W. M.
- Schultz, A. S., and Atkin, L., fermentation of maltose, III, 520.
- Atkin, L., and Frey, C. N., specificity of fermentation test for vitamin- B_{12} , III, 287. Fermentation test for vitamin- B_{12} , III, 287. Vitamin- B_{12} , a growth-promoting factor for yeast, III, 921.
- Light, R. F., Cracas, L. J., and Atkin, L., concentration of vitamin- B_{12} in rat tissues, III, 702.
- See also Atkin, L., and Light, R. F.
- Schultz, B. H., measuring intensities of magnetisation, I, 222.
- See also De Haas, W. J.
- Schultz, C. A. See Ohle, H.
- Schultz, H. See Brauch, F.
- Schultz, H. L. See Pollard, E.
- Schultz, H. W. See Boissevain, C. H.
- Schultz, J. See Caspersson, T.
- Schultz, M. P., association between rheumatic fever and exophthalmic oitre, III, 579. Induction of carditis by combined effects of hyperthyroidism and infection, III, 1049. Allergic irritability in rheumatic and nephritic patients, III, 1090.
- and Rose, E. J., catalytic potency of blood in rheumatic fever, III, 553. Induction of carditis by treatment of infected guinea-pigs with insulin, III, 557. Evolution of disseminated bacterial infection in guinea-pigs: influence of insulin and phloridzin, III, 781.
- Schultz, R. F., ester hydrolysis equilibria: formic acid esters, I, 471.
- Schultz, W., and Hilgenberg, H., determination of coagulation time of blood, III, 9.
- Schultze, G. R., physical chemistry and origin of petroleum, I, 164.
- and Weller, H., thermal stability of butane and isobutane, II, 95.
- Schultze, M. O., effect of deficiencies in copper and iron on the cytochrome-oxidase of rat tissues, III, 938.
- Schultze-Jena, B., spiral structure of arterial wall, III, 955.
- Schultzer, P., preventive method for determination of vitamin-D by direct measurement of width of the metaphysis, III, 605. Cardiac insufficiency and oedema in beriberi, III, 766.
- and Lebel, H., spontaneous hyperventilation tetany, III, 1033.
- Schulutko, I. B. See Barbas, M. I.
- Schulvas-Sorokina, R., and Jevdokimov, V., dielectric constants of ammonium chloride and fluoride at the transition points, I, 302.
- Schulz, A. See Brigl, P.
- Schulz, F., histochemistry of the adrenal medulla, III, 140.

- Schulz, G. V., deviation of the viscosimetric from mean mol. wt. for materials with a mol. wt. distribution according to the Gauss law of errors, I, 135. Highly polymerised compounds. CCXI. Solubility of substances of high mol. wt. VI. State of the solvent in the system acetone-cellulose nitrate at low and high concentrations (0.1 to 75%), I, 319. Kinetics of chain polymerisation. V. Influence of different modes of reaction on the polymolecularity, I, 375.
- and Dinglinger, A., kinetics of chain polymerisation. VI. Distribution of the mol. wt. in the polymerisation of polystyrene, I, 375.
- Dinglinger, A., and Husemann, E., kinetics of chain polymerisation. VII. Thermal polymerisation of styrene in various solvents, I, 526.
- and Wittig, G., excitation of chain polymerisation by free radicals, I, 422.
- Schulz, H., effect of a dry diet and fasting on intestinal flora, III, 591.
- Schulz, H. J. See Hahn, G.
- Schulz, L., oxidation of semiacetals, II, 6. See also Schmidt, Harry.
- Schulz, P., width and displacement of spectral lines in the high-pressure mercury discharge, I, 112. See also Kern, J., and Rompe, R.
- Schulz, W., electrocardiogram in 100 patients with healthy hearts, III, 455. Action of female sex hormones in gastric and duodenal ulcer, III, 1058.
- Schulz-Utermöhl, H., determination of efficacy of wound ointments, III, 775.
- Schulze, E., anterior pituitary lobe, thyroid gland, and scurvy, III, 258.
- and Hundhausen, G., relations between vitamin-A and thyrotropic hormone, III, 577. Effect of B-avitaminosis on thyroid, pituitary, and adrenals, III, 972.
- and Mellinghoff, K., adrenal cortex, anterior pituitary, and thyroid gland, III, 682. See also Hundhausen, G.
- Schulze, R. See Henschke, U.
- Schulze, Reinhard, velocity and dispersion of audible sound in chlorine, I, 66.
- Schulze, W. See Fredenhagen, K.
- Schumacher, A. E. See Bauernfeind, J. C.
- Schumacher, G. See Fuchs, W.
- Schumacher, H. J., photochemical reaction between chlorine and trichlorobromomethane, I, 330. Thermal decomposition of fluorine oxide; theory of unimolecular reactions, I, 375. See also Franke, W., Müller, K. L., and Schmitz, H.
- Schumann, H., increased thyroxine sensitivity of the hyperactive heart muscle, III, 657. Heart during increased mechanical work, III, 657. Carbohydrate metabolism of heart muscle in diphtheria-poisoned animals, III, 822. Action of male sex hormones on glycogen and phosphagen content of cardiac muscle, III, 822.
- Schumann, T., mechanical device for smoothing data, I, 494.
- Schumb, W. C., and Saffer, C. M., jun., organo-silicon synthesis. II. Reactions of aryl Grignard reagents with silicon halides, II, 192.
- Schumm, O., porphyrin content of blood with special reference to haematoporphyrin, III, 814.
- Schunke, G. B., anatomy and development of the sacro-iliac joint in man, III, 441.
- Schur, I. B., ketosis in circulatory insufficiency, III, 558. and Kiriuschin, F. V., clinical method of determining velocity of circulation of blood, III, 456.
- Schur, J. See Jaanus, R.
- Schur, J. S., influence of heat treatment in a magnetic field on distribution of the spontaneous regions of a ferro-magnetic monocystals, I, 186.
- Schurr, C. G., convergence rule, III, 753.
- Schusselé, W. See Brandt, H.
- Schuster, C. E. See Evenden, W.
- Schuster, H. F., tribenzoylascorbic acid, III, 995.
- Schuster, N. H., oxalate or citrate in sedimentation test? III, 550.
- Schuster-Woldan, E. R., action of nicotine on *Lebistes reticulatus*, III, 91.
- Schusterius, C. See Büssem, W.
- Schustova, M. B. See Izmailov, N. A.
- Schutz, P. W., binary liquid systems. I. Vapour-liquid equilibria in the system carbon tetrachloride-ethyl acetate, I, 612.
- Schulvalov, M. See Kurnakov, N. S.
- Schuyt, J. W. See Groen, J.
- Schvemberger, V. I. [with Gordon, V. M.], destructive chlorination of organic compounds. I. Naphthalene, II, 253.
- Schvetzova, K. B., stratification in the system sulphuric acid-water-phenol, I, 81.
- Schwab, E. H., and Curb, D. L., diagnosis of hypertensive cardiovascular disease without hypertension, III, 123.
- Schwab, G. M., kinetics of electrolytic dissociation equilibria, I, 143.
- Schwab, H., developmental changes of silver fibres in human kidney, III, 1023.
- Schwab, R. M. See Thomas, J. M.
- Schwab, R. S., and Cobb, S., simultaneous electromyograms and electro-encephalograms in paralysis agitans, III, 469.
- and Viets, H. R., prostigmine test in myasthenia gravis, III, 368. See also Ross, D. A., and Thomas, J. M.
- Schwabe, E. L., and Emery, F. E., progesterone in adrenalectomised rats, III, 977. See also Emery, F. E.
- Schwaibold, J., and Lesmüller, A., micro-determination of copper, lead, and zinc in biological material with dithizone (diphenylthiocarbazone). II. Ashing, III, 540.
- Schwantke, J. See Dyckerhoff, H.
- Schwarte, L. H. See Eveleth, D. F.
- Schwarte, W., poisoning with thallium dust, III, 1088.
- Schwartz, A., attribution of the diazo-reaction of the blood to histidine, III, 962. Riegert, A., and Bricka, M., micro-determination of glyoxalines, especially histidine, in serum, III, 452.
- Schwartz, B. M. See Smith, P. K.
- Schwartz, G. M., paragenesis of pyrrhotite, I, 109. Significance of bornite-chalcocite micro-textures, I, 586.
- Schwartz, H. P., and Elman, R., effect of sorbitol and sucrose on cerebrospinal fluid pressure and urine output, III, 392.
- Schwartz, L., incidence of occupational dermatoses and their causes in the basic industries, III, 317. and Andrews, G. C., preventing dermatitis from dress shields, III, 90. and Warren, L. H., dermatitis caused by new insecticide, III, 1005. See also Flippin, H. F., and Foerster, H. R.
- Schwartz, P. See Grieco, E. H.
- Schwartz, S. O. See Dameshek, W.
- Schwartz, S. P., and Jezer, A., action of digitalis bodies in transient ventricular fibrillation, III, 85.
- Schwartz, W. F., effect of thio-bismol on therapeutic malaria, III, 509.
- Schwartz, W. P. See Ecker, E. E.
- Schwartz, K., treatment of coeliac disease with adrenal cortex hormone, III, 387. Effect of rectal glucose on blood-sugar, III, 451.
- Schwarz, A. See Dain, B.
- Schwarz, H. See Kohn, J. L.
- Schwarz, K. E., and Stockert, R., electrolytic migration of gold in solid lead-gold alloys, I, 421.
- Schwarz, L. See Fleischmann, F.
- Schwarz, R., chemistry of the weathering process [in aluminosilicate rocks], I, 438. and Gregor, U., new halides of silicon. IV. Silicon chloride of formula SiCl₄, I, 427. and Wiele, H., bromine oxide, Br₂O, I, 92. Bromine oxides. II, I, 274.
- Schwarz, W., carpal joints of reptiles, III, 805.
- Schwarzenbach, G., Mohler, H., and Sorge, J., molecular resonance systems. VII. Different ionisation steps of indophenols and indamines and their absorption spectra, I, 57. and Rudin, E., mechanism of influence of substituents on the reactivity of benzene derivatives, I, 263.
- Schwarzwald, K. See Mitchell, S.
- Schwedt, H. See Schroder, Wilhelm.
- Schweers, A., disturbance of the carbohydrate metabolism in essential hypertension, III, 300. Acute myeloid reaction of the blood in diseases not due to leukaemia, III, 349.
- Schweickert, H., thermo-electric potential of the element metal-semiconductor-metal. II. Variation with temperature, from -80° to 70°, of the thermo-electric power of cuprous oxide, I, 132.
- Schweiger, E. See Kaunitz, H.
- Schweinsberg, H. G. S., action of the ultra-short-wave field on bacteria, III, 337.
- Schweitzer, A., Stedman, Edgar, and Wright, S., central action of anticholine-esterases [on spinal cord], III, 1035. and Wright, S., action of nicotine on spinal cord, III, 30. Action of prostigmine and acetylcholine on respiration, III, 181.
- Schweitzer, C. E. See Fieser, L. F., and Riegel, B.
- Schweizer, A., [vacuum filter apparatus], I, 539.
- Schwemmler, B., action of vitamin-A on growth of hair and nails, III, 1068.
- Schwengler, K. See Dieterle, H.
- Schwenk, E. See Fleischer, G.
- Schwenkenbecher, W., ketonæmia in diabetes, III, 120.
- Schwinger, J. See Cohen, V. W., and Manley, J. H.

- Schwinn, E. See Strecker, W.
- Schworl, N., determination of calcium by means of loreline, I, 385.
- Scislounoff, effect of feeding large quantities of aneurin (vitamin-B₁) on quantity in human urine, III, 851. Elimination in urine of aneurin (vitamin-B₁) administered intraspinally, III, 851. Urinary excretion of large doses of aneurin (vitamin-B₁) administered by subcutaneous injection, III, 851. Significance of urinary vitamin-B₁ excretion, III, 1069.
- and Bauer, F. K., urinary vitamin-B₁ excretion in pathological conditions, III, 702.
- Scislowski, W., electric currents and reverse potentials in paraffin irradiated with X-rays, I, 60. Effect of temperature on electric currents in paraffin, I, 302.
- Scorgie, N. J. See Stableforth, A. W.
- Scott, A. H., and Curtis, H. L., edge correction in the determination of dielectric constant, I, 494.
- Scott, A. V. See Witham, L.
- Scott, B. See Carl, M.
- Scott, C. C., Scott, W. W., and Luckhardt, A. B., effect of alcohol on hunger sense, III, 86.
- See also Scott, W. W.
- Scott, D. A., crystalline insulin, III, 1050.
- and Fisher, A. M., preparation of insulin, III, 49. Insulin and zinc content of normal and diabetic pancreas, III, 50.
- See also Fisher, A. M.
- Scott, E. W. See Machle, W. F.
- Scott, G. A., and Meerapfel, O., effect of sulphonamides on blood serum, III, 1084.
- Scott, G. H., and Canaga, B. L., jun., calcium in mammalian retina, III, 903.
- and Packer, D. M., localisation of minerals in animal tissues by the electron microscope, III, 734. Magnesium and calcium in striated muscle as revealed by electron microscope, III, 968.
- Scott, G. W., jun., focussed beam source of hydrogen and helium ions, I, 395.
- See also Smith, L. P.
- Scott, H. M., Hughes, J. S., and Warren, D. C., augmentation of nitrogen in the egg-white after formation of shell membranes in the fowl, III, 69.
- See also Beadle, B. W., and Feinberg, J. G.
- Scott, J. T., synergistic action of drugs with cocaine, III, 187.
- Scott, K. G. See Lawrence, J. H., and Tuttle, L. W.
- Scott, L. I. See Priestley, J. H.
- Scott, M. See Roberts, L. J.
- Scott, R. B., sternal puncture in diagnosis of diseases of blood-forming organs, III, 741.
- Scott, R. D., and De Long, G., preparation of colloidal gold solution, III, 344.
- Scott, T. F. M., and Elford, W. J., size of the virus of lymphocytic choriomeningitis as determined by ultrafiltration and ultracentrifugation, III, 796.
- Scott, T. McN. See MacCallum, F. O.
- Scott, W. J., gas transport by the blood of the opossum, *Didelphys virginiana*, III, 241.
- See also Irving, L.
- Scott, W. J. M., and Schroeder, C. F., denervation of the bladder for relief of intractable pain, III, 253.
- Scott, W. W., Scott, C. C., and Luckhardt, A. B., blood-sugar level before, during, and after hunger periods in man, III, 12.
- See also Scott, C. C.
- Scott-Moncrieff, R. See Beale, G. H., and Price, J. R.
- Scoular, F. I., copper in nutrition as studied by spectrographic analysis, III, 283. Zinc in nutrition; spectrographic analysis, III, 701. Aluminium in nutrition: spectrographic study, III, 1067.
- Scouras, P., catatonia in acute psychoses of toxic origin, III, 830.
- Scowen, E. F. See Spence, A. W.
- Scriba, K. See Luckner, H.
- Scriba, W. See Borsche, W.
- Scribner, B. F., spectroscopic detection of rare earths in plants, III, 949.
- See also Meggers, W. F.
- Scribner, E. J. See Krueger, A. P.
- Sudder, J., Drew, C. R., Corcoran, D. R., and Bull, D. blood preservation, III, 815.
- Smith, M. E., and Drew, C. R., plasma-potassium content of cardiac blood at death, III, 1028.
- See also Zweher, R. L.
- Sudder, S. A., practical work kit for pneumococcus typing: Neufeld test, III, 332.
- Scudi, J. V., reduction of prontosil-soluble by urine, III, 82.
- and Ratish, H. D., colorimetric determination of ascorbic acid, III, 403.
- Ratish, H. D., and Bullowa, J. G. M., Schiff base hydrochlorides; test for arylamines, II, 500.
- See also Ratish, H. D.
- Scul, C. W., method for visualising pressure and volume changes applicable to observations on the rhythmic variations in peripheral circulation, III, 562.
- Bach, T. F., and Pemberton, R., serum-proteins in rheumatoid disease, III, 553.
- Scultesky, G. V. See Garbarino, G.
- Seaborg, G. T., and Kennedy, J. W., nuclear isomerism and chemical separation of isomerides in tellurium, I, 233.
- Livingood, J. J., and Kennedy, J. W., radioactive tellurium: further production and separation of isomers, I, 295.
- and Segre, E., nuclear isomerism in element 43, I, 350.
- See also Kennedy, J. W., Lewis, G. N., Livingood, J. J., and Segre, E.
- Seager, G. C. See Bradley, A. J.
- Seager, K. G. See Page, A. P. M.
- Seager, L. D., effect of potassium chloride on normal and denervated iris, III, 865.
- See also Auer, J.
- Seal, S. C. See Linton, R. W.
- Searight, W. V. See Moxon, A. L.
- Searle, D. S. See Reiner, L.
- Searles, P. W., changes in skin and rectal temperatures during surgical operations under anaesthesia, III, 88.
- Sears, H. J. See Sullivan, N. P.
- Sears, J. E. See Barrell, H.
- Seashore, R. T., artificial impregnation, III, 386.
- Seaver, E. P., fear and pain in oto-laryngologic surgery [with reference to local and general anaesthesia], III, 187. Chronic infectious nasal sinusitis and refined carbohydrates in the food [and vitamin-B deficiency], III, 286.
- Sebastianelli, A., effect of dehydrocholate on blood-alcohol, III, 82.
- Sebastiani, A., new formula for determination of duration of the cardiac systole, based on duration of the cardiac cycle, III, 235.
- Seber, L. See Bauer, K. H.
- Sebesta, V., Smith, R. M., Fernald, A. T., and Marble, A., vitamin-C status of diabetic patients, III, 402.
- Sebrell, W. H., and Butler, R. E., reaction to the oral administration of nicotinic acid, III, 288.
- Onstott, R. H., Fraser, H. F., and Daft, F. S., nicotinic acid in prevention of black-tongue of dogs, III, 166.
- Sebulke, P., development of the extracranial path of the nerv. alveolaris inf. up to birth, III, 224.
- Secher, K., osteomalacia as an explanation of dwarfism, III, 403.
- Sechzer, P. H. See Brown, A.
- Seckel, H. P. G., influence of various physiological substances on glycogenolysis in surviving rat liver, III, 272.
- Secker, J., adrenals and transmission of activity of sympathetic nerves of cat, III, 132, 570.
- Secrest, P. G., jun. See Prince, H. E.
- Sedallian, P., Jourdan, F., and Clavel, antitoxin production following Eck fistula [of liver], III, 273. Storage of antitoxins in the liver, III, 338.
- See also Hermann, H.
- Sédan, J., two cases of dinitrophenol cataract, III, 752.
- Sedashcheva, E. G. See Adadurov, I. E.
- Sedlacek, K., treatment of diphtheria and scarlet fever by active immunisation, III, 102.
- Sedletzki, I. D., gedroizite in the alkali soils, I, 500.
- Seebach, F., isolation of phenol dialcohols from reaction mixtures, II, 476.
- Seebach, W. See Winkler, H.
- Seebold, J. E. See Gilliland, E. R.
- Seeder, W. A. See Wijk, W. R. van.
- Seedorf, S. See Thiele, W.
- Seeds, A. E. See Woodhall, B.
- Seeger, G. P. See Haagen, E.
- Seeger, H. See Leuchs, H.
- Seeger, P. G., microchemical investigation on ascites cells in mice, III, 5.
- Seeger, R. J., and Teller, E., dielectric breakdown in ionic crystals, I, 551.
- Seegers, W. H., nitrogen excretion on a nitrogen-free diet, III, 172.
- Brinkhous, K. M., Smith, H. P., and Warner, E. D., purification of thrombin, III, 99. Use of purified thrombin as hemostatic agent, III, 550.
- See also Brinkhous, K. M.
- Seekles, L., rate of exchange of calcium between blood and tissues in experimental hyper- and hypo-calcaemia, III, 188. Autonomic regulation II. [Effects of injection of calcium], III, 308.
- Seeley, M. See Anderson, Ernest.
- Seelich, cation effect at boundaries of acidoid character, I, 74.
- Seely, S. See Zinn, W. H.
- Seelye, J. M. See Barbour, H. G.
- Seetharamiah, A. See Manjunath, B. L.

- Seevers, M. H., Enzer, N., and Becker, T. J., respiratory and circulatory adaptation to acute anoxia in silicosis and cardio-vascular disease, III, 241.
- Seffert, H. See Siebert, W. W.
- Sefránek, B. See Frejka, J.
- Segal, G., and Leblond, C. P., alarm reaction produced by X-rays, III, 318.
- See also Leblond, C. P.
- Segal, H. L., cigarette smoking, III, 417.
- Segal, J., local potential differences in response to strong light stimuli, III, 835.
- See also Piéron, H.
- Segaloff, A. See Janes, R. G.
- Segall, H. N. See Goldbloom, A.
- Segebrecht, E. W. See Ralston, A. W.
- Segers, M., frequency accommodation during electric polarisation of the heart, III, 454. Frequency changes following depolarisation of the heart, III, 454. Accommodation of frequency of the heart to pressure, III, 558. Facilitation of heart rhythm in the frog, III, 820. Effect of phase of hyperexcitability on rhythm of auricles, III, 964. Frequency accommodation in heart rhythm during sub-rheobasic stimulation, III, 964. Rhythmic activity of left auricle of the rabbit during stimulation by constant currents, III, 964.
- Seggel, K. A., agranulocytosis, III, 349.
- and Reiher, H., organisation of blood transfusions, III, 353. Blood donor organisation and blood transfusion, III, 448.
- See also Rieder, W.
- Segré, E., element 43, I, 231. Unsuccessful search for transuranic elements, I, 397.
- Halford, R. S., and Seaborg, G. T., chemical separation of nuclear isomerides, I, 169.
- and Seaborg, G. T., nuclear isomerism in element 43, I, 3.
- See also Artom, C., Gentner, W., Jenkins, F. A., Perrier, C., and Seaborg, G. T.
- Segura, A. S., mechanism of ventricular "escape" from the vagus, III, 819.
- Sehra, K. B. See Iyengar, N. K.
- Seib, G. A. See Burford, E. H.
- Seiberlich, J. See Katz, J. R.
- Seibert, F. S., Pedersen, K. O., and Tiselius, A., mol. wt., electrochemical and biological properties of tuberculin protein and polysaccharide molecules, III, 207.
- Seidel, A., Larionov, J., and Filippov, A. N., analytical applications of fluorescence solutions of rare-earth salts, I, 99.
- See also Larionov, J.
- Seidel, W., simple gas generator, I, 223.
- Seideman, R. M., comparative study of old tuberculin and purified protein derivative, III, 945.
- Seifert, H., tarnowitzite and plumbocalcite; mechanism of intergrowth in anomalous mixed crystals, I, 288.
- Seifert, R. L. E., and Phipps, T. E., periodic deviation from the Schottky line. I, I, 589.
- Seifert, W., action of pervitin in man, III, 778.
- Seifter, J., yields of stibines and arsines, II, 146. Pharmacology of metal alkyls. II. Trimethylstibine, III, 865.
- See also Sollmann, T.
- Seigle, J., distribution in crystallisations in thin films from the molten state in the presence of added coloured compounds of a colloidal nature, I, 139.
- Seigle, L. W., and Hass, H. B., vapour-phase nitration of isopentane [β -methylbutane], II, 295.
- Seigneurin, R., variation in the electrical charge of bacteria during culture, III, 201. Variation of weight, agglutination, and virulence of bacteria as a function of age of the culture, III, 794. Effect of age of organism on variations as function of time in the weight, dimensions, and agglutination of sub-cultures, III, 794. Physical and physiological ages of micro-organisms, III, 1010.
- See also Lisbonne, M.
- Seikel, (Miss) M. K. See Huntress, E. H.
- Seiki, stereoisomerides of isoserine, II, 495.
- See also Tomita, M.
- Seil, G. E., and Heiligman, H. A., crucible support, I, 582.
- Seiler, K., apparatus for safeguarding high-vacuum pumps, I, 45. Simple method of reaching helium temperatures, I, 388.
- Seiler, S., treatment with septasine, III, 711.
- Seitter, W., influence of temperature on formation and recombination of ions in α -ray columns, I, 115.
- Seitz, F., interpretation of crystal luminescence, I, 122. Nature of lattice defects in silver bromide crystals, I, 128.
- See also Gordon, N. T.
- Seitz, G., clinical significance of the "flockungszahlreaction," III, 648.
- Seitz, W., anaerobic photochemical reduction of redox dyes by pyruvic acid, lactoflavin, and quinine, I, 530. Dehydrogenation of glyceraldehyde by adrenaline, III, 682.
- Seiwert, R. See Prelog, V.
- Seka, R. See Kohlrausch, K. W. F.
- Seki, M. See Kanamaru, K.
- Sekiya, S., experimental infection of guinea-pigs with *C. diphtheria*. II. Induction of a carrier state in guinea-pigs. III. Treatment of diphtheria carriers, III, 203.
- Selbach, H., and Weber, E., postnarcotic alkalosis, III, 87.
- Selbie, F. R. See McIntosh, J.
- Selby, D. L. See Nicholson, T. F.
- Selby, J. W. See Robinson, Conmar.
- Selby, W. M. See Ralston, A. W.
- Seligman, A. M. See Fieser, L. F.
- Seligman, G. See Perutz, M. F.
- Selikowitz, A. L., solution of an equation occurring in the theory of consecutive reactions, I, 325.
- Selivanov, F. F., variability in mineral composition of the water of rivers of the U.S.S.R., I, 225.
- Selivanova, A. S., and Sirkin, J. K., effect of solvents on kinetics, I, 526.
- Seljanskaja, A. I. See Riss, I. G.
- Sell, H. M., and Kremers, R. E., methylation of ursolic acid, II, 80.
- Sellards, A. W. See Bennett, B. L., and Tyzzer, E. E.
- Sellei, C., respiration of animal tumours, III, 848.
- Gábor, I., and Kucharik, I., effect of phloridzin on metabolism of dyes, calcium, and uric acid, III, 772.
- and Mayer, G., effect of iodine on gas metabolism of the tissues, III, 498. Effect of hypnotics, III, 778.
- See also Mosonyi, L.
- Sellers, A. H. See Defries, R. D.
- Selling, L. S., abnormalities of eye and significance in traffic court cases, III, 1041.
- Sellner, J. See Lindner, J.
- Selman, I. W. See Bolas, B. D., and Watson, D. J.
- Seltz, H., and De Witt, B. J., thermodynamic study of the lead-antimony system, I, 606.
- See also McDonald, H. J.
- Selwood, P. W. See Haller, R. B.
- Selye, H., effect of the alarm reaction on absorption of toxic substances from the gastro-intestinal tract, III, 63. Blood-sugar and -chloride changes in thyroidectomised rats following exposure to various damaging agents, III, 138. Experimental production of peptic haemorrhagic oesophagitis, III, 147. Experimental evidence supporting the conception of "adaptation energy," III, 277.
- and Foglia, V. G., blood-sugar changes in hypophysectomised rats during adaptation to various stimuli, III, 46. Formation of haemolymph nodes during "alarm reaction," III, 651.
- and Masson, G., effect of oestrogens as modified by adrenal insufficiency, III, 981.
- and Schenker, V., bioassay of adrenal cortical hormone, III, 378. Haemolymph nodes of the rat (iron pigment lymph nodes), III, 650.
- See also Karady, S., McEuen, C. S., and Masson, G.
- Selzer, A. See Wood, P.
- Selzer, L. See Kaunitz, H.
- Semenov, N. N., chain character of the oxidation of hydrides, I, 149. Kinetics of complex reactions, I, 568.
- Semerano, G. See Miotati, A.
- Semischin, V. I., viscosity and m.p. in the system hydrazine-water, I, 68. Thermal analysis of the system hydrazine-carbamide, I, 372. Binary systems containing hydrazine. III. Thermal analysis of the system hydrazine-phenol, I, 612.
- Semmens, C. S., and Bhaduri, P. N., differential staining of nucleoli and chromosomes, III, 645.
- Semmens, E. S., hydrolysis of starch films by polarised infra-red radiation, I, 621.
- Sempronj, A., derivatives of 1:2-benzanthraquinone-4'-sulphonic acid, II, 514.
- and Morelli, E., carcinoma of kidney in rats treated with β -anthraquinoline, III, 697.
- Semrad, E. V. See Thomas, J. M.
- Sen, A. B. See Nayar, M. R.
- Sen, B. N., closest distance of approach of atoms, I, 56. Parachor and velocity of sound in metallic elements, I, 67. Downward movement of a ring of a precipitate through the particles of a precipitate of a different kind, I, 91.
- Sen, D. C., determination of cobalt in presence of nickel, I, 100. Camphor series. V. Derivatives of oximiniothio-camphor, II, 120.
- Sena, L. A., energy of positive ions in plasma of gas discharge, I, 230.
- Senderova, V. M. See Tschuchrov, F. V.
- Sendju, Y., and Sikuma, K., effect of nutrition on oxidation in the organism, III, 599.
- Sendrai, M., and Cahuzac, M., peri-arterial injections of novocaine in the pancreas, III, 614.
- Cahuzac, M., and Tamalet, L. J., effect of intra-arterial injection of novocaine on pancreatic circulation and blood-sugar, III, 614.

- Sendroy, *J. jun.*, tests for purity of silver iodate prepared for chloride determination, I, 213. Photo-electric micro-determination of chloride in biological fluids and of iodate and iodine in protein-free solutions, III, 1114.
- and Miller, *B. F.*, renal function as a factor in the urinary excretion of ascorbic acid, III, 390.
- Senekjian, *H.* See Dennis, *E. W.*
- Senff, *H.*, and Klemm, *W.*, bi- and quadrivalent compounds of the rare earths. IX. Ytterbous [selenide and telluride], I, 483.
- See also Klemm, *W.*
- Senger, *N.* See Bodendorf, *K.*
- Sengoku, *H.* See Fujikawa, *F.*
- Sen-Gupta, *A. K.*, rotational analysis of the ultra-violet bands of germanium monoxide, I, 177. Band spectrum of antimony monoxide (SbO), I, 508.
- Sen-Gupta, osmotic values and chloride contents of plants of salt areas in Bengal, III, 798. Histochemical detection of sodium in Bengal plants, III, 802.
- Sen-Gupta, *N. C.*, moving-boundary method for determination of cataphoresis of colloids, I, 78. Physicochemical properties of Indian bentonites. I, I, 226.
- Sen-Gupta, *R. L.*, scattering of fast β -particles by xenon nuclei, I, 230.
- Sen-Gupta, *S. C.*, dehydrogenation. II.—IV. [Tetrahydronaphthalene-*spiro*-cyclopentanes], II, 148, 308, 538.
- Senior, *F. A.* See Abramson, *D. I.*
- Seniuta, *N. K.*, potentiometric determination of molybdenum, I, 158.
- Senju, *R.* See Tsujimoto, *M.*
- Senoh, *Y.* See Akabori, *S.*
- Senseman, *C. E.* See Lockwood, *L. B.*
- Senyürek, *M. S.*, pulp cavities of molars in primates, III, 807.
- Sequeira, *J. H.*, cutaneous manifestations of vitamin deficiency, III, 399.
- Seppala, *I.* See Jalavisto, *E.*
- Serafinówna, *M.* See Supniewski, *J. V.*
- Serane, *J.* See Turpin, *R.*
- Serby, *A. M.* See Schindler, *R.*
- Serebrennikov, *G. A.* See Issaguliantz, *V. I.*
- Serebriankova, *L.* See Margaritov, *V.*
- Serejski, *M.*, value of the "oxidation-reduction potential" [in schizophrenia], III, 573.
- Sereslis, *N.* See Dirr, *K.*
- Serfaty, *A.* See Louvier, *R.*
- Sergeant, *G. A.* See Bassett, *H.*
- Sergeev, *A.*, body temperature of reptiles in natural surroundings, III, 695.
- Sergeev, *A. P.*, and Javorski, *A. N.*, single metal reversion cell, I, 202.
- Sergent, *E.*, vitamin-B as a growth-factor for mosquito larvae (*Anopheles* and *Culex*), III, 919.
- Sergeyeva, *M. A.*, microscopic changes in the pancreas produced by sympathetic and parasympathetic stimulation, III, 593.
- Sergienko, *S. R.*, dehydrogenative, hydro-generative, and irreversible catalysis of the dimeride of butadiene (1-vinyl- Δ^3 -cyclohexene), II, 205.
- See also Kazanski, *B. A.*
- Sergievskaja, *S. I.*, and Nesvadba, *V. V.*, hydrolysis of the amide and nitrile of 4-nitro-1-naphthoic acid, II, 65. Anaesthetics of the naphthalene series. I. 4-Amino-1-naphthoic acid esters, II, 66.
- Serini, *A.*, and Logemann, *W.*, isomerism of allopregnanetetraol, II, 112.
- Logemann, *W.*, and Hildebrand, *W.*, preparation of the principles of the adrenal cortex, II, 157.
- Serota, *H.* See Grinker, *R. R.*
- Serota, *H. M.*, temperature changes in the cortex and hypothalamus during sleep, III, 468.
- Serrati, *A.*, and Pescetto, *F.*, glucose absorption from an intestinal (Vella) loop in normal and depancreatised dogs, III, 758.
- Serrure, *G.* See Gaspard, *R.*
- Servant, *R.*, birefringence measurements in the far ultra-violet, I, 514.
- Servantie, *L.* See Aubertin, *E.*, and Jeanneney, *G.*
- Servigne, *M.*, infra-red luminescence emission of rare-[earth] elements, I, 58. Infra-red luminescence emission of rare elements; application to analysis, I, 509.
- See also Rouyer, *M.*
- Sery, *Z.* See Santavy, *F.*
- Seshadri, *T. R.* See Murti, *G. V. L. N.*, Murty, *P. B. R.*, Rangaswami, *S.*, Rao, *N. V. S.*, and Rao, *P. S.*
- Seshan, *P. K.* See Krishnan, *K. S.*
- Sestini, *F.*, probable mechanism of renal regulation; collateral derivation of the afferent artery, III, 151.
- Seth, *A. C.* See Dasannacharya, *B.*
- Seto, *I.*, and Ozaki, *M.*, effect of high-tension electrical discharge on catalytic reaction. IV. and V., II, 555.
- Settlage, *P.* See Maison, *G. L.*
- Setz, *P.* See Thannhauser, *S. J.*
- Setzer, *W. C.*, Leeper, *R. W.*, and Gilman, *H.*, lead tetraphenyl and lead diphenyl dihalides, II, 460.
- Sevastianov, *N. G.* See Shdanov, *G. S.*
- Severac, *M.* See Raiziss, *G. W.*
- Severi, *R.*, enterococcus, M, III, 794.
- Severinghaus, *A. E.*, and Thompson, *K. W.*, production of antihormones by prolonged administration of pituitary extract; effect on anterior hypophysis, III, 1045.
- See also Kirkman, *H.*
- Sevin, *E.*, protidons, I, 547.
- Sevringhaus, *E. L.* See Golden, *J. B.*, and Lauson, *H.*
- Sewall, *K. W.*, blood, taste, digital hair, and colour of eyes in Eastern Eskimo, III, 889.
- Seward, *R. P.*, and Simons, *J. H.*, scattering of slow electrons in, and apparent electron affinity of, boron fluoride, I, 114.
- See also Simons, *J. H.*
- Sexton, *G. B.*, caution in arsphenamine therapy, III, 865.
- Sexton, *W. A.*, benzthiazole derivatives. I. Reactivity of the methylthiol group in quaternary salts of 1-methylthio-benzthiazole, II, 231.
- See also Reed, *F. P.*
- Seybold, *A.*, and Egle, *K.*, proportions of chlorophyll and carotenoids in the faeces of various animals, III, 484. Chlorophyll and carotenoids in marine algae, III, 636.
- Seyer, *W. F.*, and Morris, *W.*, density and transition points of dotriacontane (dicetyl), I, 363.
- Seyffarth, *H.*, electrical responses of single motor-units in the biceps muscle in a case of traumatic lesion of the musculocutaneous nerve, III, 463.
- Seyfried, *H.*, and Wachner, *G.*, adrenaline secretion after X-irradiation of the adrenal glands, III, 911.
- See also Lutz, *W.*
- Seyhan, *M.* [with Aksu, *S.*], aromatic compounds of fluorine; fluorothiophenol, II, 210.
- [with Esmer, *N.*], aromatic fluoro-compounds, II, 153.
- Seymour, *D. E.*, Sharples, *K. S.*, and Spring, *F. S.*, triterpene resinols and related acids. VII., II, 435.
- Seymour, *F. I.*, sterile motile spermatozoa, proved by clinical experimentation, III, 913.
- Seymour, *K. M.*, improved [organic] procedures, II, 493.
- Seymour, *M.* See Lyon, *R. A.*
- Seymour, *W. B.*, Spies, *T. D.*, and Payne, *W.*, gastric secretion in chronic alcoholic addiction, III, 387.
- Seymour, *W. D.*, improving the blackboard, III, 38.
- Shabotinskaja, *V. E.* See Lichoscherstov, *M. V.*
- Shaby, *J. A.* See Hoff, *H.*
- Shackman, *R.* See Scharpey-Schafer, *E. P.*
- Shadinger, *G. H.* See Michael, *A.*
- Shadle, *A. R.*, Valvo, *N. I.*, and Eckhert, *K. M.*, extrusive growth and attrition of the incisor teeth of *Cavia cobaya*, III, 542.
- Shafar, *J.*, chorea and athetosis in childhood, III, 467.
- See also Drought, *C. W.*
- Shafer, *J. jun.*, effect of light on carbon dioxide in leaves, III, 213.
- Shaffer, *B.*, effect of copper in vitiligo, III, 89.
- Shaffer, *F.* See Meyer, *C.*
- Shaffer, *W. H.*, and Nielsen, *H. H.*, vibration-rotation energies of the non-linear triatomic XY₂ type of molecule, I, 511.
- Nielsen, *H. H.*, and Thomas, *L. H.*, vibration-rotation energies in the tetrahedrally symmetric XY₄ type of molecule, I, 358.
- Shah, *H. A.*, and Shah, *R. C.*, synthesis of 5-hydroxycoumarin, II, 31. γ -Substitution in the resorcinol nucleus. II. Gattermann reaction with resacetophenone. III. 2,6-Dihydroxy-3-ethylbenzaldehyde. IV. Gattermann reaction with polyhydroxyacetophenones, II, 115, 161, 373.
- Shah, *N. M.*, chloralides; condensation of butylchloral with α -hydroxycarboxylic acids, II, 533.
- and Shah, *R. C.*, [Pechmann reaction with ethyl α -acetylglutarate], II, 124. Conversion of coumarin derivatives into α -methoxycinnamic acids, II, 262.
- See also Deliwala, *C. V.*
- Shah, *R. C.*, and Laiwalla, *M. C.*, γ -substitution in the resorcinol nucleus. I. Synthesis of γ -resorcyllaldehyde, II, 22.
- See also Shah, *H. A.*, and Shah, *N. M.*
- Shah, *S. V.*, and Pishawikar, *D. G.*, bromination of aliphatic ketones, II, 6. Preparation of *m*-dinitrobenzene, II, 147. Bromination of aliphatic ketones, II, 244.
- Shahan, *M. S.* See Schoening, *H. W.*
- Shaine, *M. S.*, benzedrine sulphate in persistent hiccup, III, 308.
- Shaklee, *A. O.*, Mikola, *O. J.*, and Oppenheimer, *H. E.*, relation of muscle receptive substance [of pupil] to contractile mechanism; responses to heat and drugs, III, 1035.

- Shalyt, S., anomalous properties of anhydrous salts of the iron group at low temperatures, I, 461.
- Shamboorov, D. A., and Tchibukmakher, N. B., peripheral nervous barrier, III, 374.
- Shand, S. J., staining of feldspaths, and zonal structure in nepheline, I, 586.
- Loch Borolan laccolith, N.W. Scotland, I, 588.
- Shanker, J. See Prasad, M.
- Shanklin, W. M., anthropometry of Syrian males, III, 544.
- Shankman, S., and Gordon, A. R., vapour pressure of aqueous solutions of sulphuric acid, I, 566.
- Shannon, J. A., tubular reabsorption of xylose in the normal dog, III, 152.
- Urea excretion in the normal dog during forced diuresis, III, 153.
- Renal tubular excretion, III, 274.
- and Fisher, S., renal tubular reabsorption of glucose in the normal dog, III, 152.
- Shapiro, A. See Koster, H.
- Shapiro, B. G., control of urinary secretion by the anterior pituitary, III, 136.
- Shapiro, E. See Shepardson, H. C.
- Shapiro, H. A., ovulation in *Xenopus laevis* induced by steroids, III, 1055.
- Sapeika, N., and Finlayson, M. H., pharmacological actions of venom of *Latrodectus indistinctus*, III, 1005.
- See also Berk, L.
- Shapiro, L. M., intradermal saline test (McClure-Aldrich) in newborn infant, III, 987.
- Shapiro, S., case of essential hypertension of more than 25 years' duration showing no renal arteriolar changes, III, 22.
- Shapter, R. E., possible excretion of nitrogen by leguminous plants, III, 881.
- Share, S. S. See Breit, G.
- Sharkey, W. H. See Marvel, C. S.
- Sharma, M. L., subcutaneous corpora adiposa in *Rana tigrina*, III, 442.
- Sharma, N. L., feldspars from pegmatites of Kodarma, Bihar, I, 164.
- See also Roy, S. K.
- Sharma, P. N. See Nayar, M. R.
- Sharma, P., and Siddiqui, S., constituents of *Didymocarpus pedicellata*. II. Constitution of pedicin, isopedicin, pedicinin, and pedicellin, II, 274.
- Sharnovski, A. M., and Haisinski, B. E., nature of the bond between dipolar molecules and the central ion in the inner sphere of complex compounds, I, 511.
- Sharp, A. G. See Beckel, A. C.
- Sharp, E. A., and Mack, H. C., relationship of haemopoietic phenomena to endocrine disorders in women, III, 546.
- Schleicher, E. M., and Wolter, J. W., myeloid pattern in pernicious anaemia, III, 447.
- See also Astrachan, G. D.
- Sharp, J. G., amino-acids of rabbit myosin, III, 663.
- Sharp, P. F. See Personius, C. J.
- Sharpe, H. S., hyperparathyroidism associated with osteitis fibrosa cystica, III, 579.
- Sharpey-Schafer, E. P., and Shackman, R., effect of testosterone propionate on the prostate, III, 755.
- See also Schrire, I.
- Sharples, K. S. See Picard, C. W., and Seymour, D. E.
- Sharpless, G. R. See Zook, J.
- Shattuck, G. C., nutritional deficiency and the nervous system, III, 252.
- Shaughnessy, H. J., and Grubb, T. C., reliability of the agglutination test for undulant fever: *Brucella* agglutinins in tuberculous individuals, III, 330.
- Shaver, J. S. See Edwards, R. A.
- Shaw, A., composition of stone and of inhaled dust in relation to silicosis. I. and II., III, 936.
- and Graham, J. L., rate of production and free silica content of the fine dust produced by rock drilling, III, 782.
- See also Haldane, J. S.
- Shaw, A. O. See Gildow, E. M.
- Shaw, C., sodium dehydrocholate solution as a solvent for neoarsphenamine in the treatment of syphilis, III, 509.
- Shaw, D. R., Kenney, A. S., and Stokes, J., serology and immunology of the viruses of human and swine influenza, III, 633.
- See also Morrison, A. P.
- Shaw, H. E. B. See Kelley, R. B.
- Shaw, J. L. D., and McFarlane, W. D., determination of tryptophan by a modified glyoxylic acid method employing photo-electric colorimetry, II, 134.
- Shay, H., Gershon-Cohen, J., Fels, S. S., Meranze, D. R., and Meranze, changes in the gonads and pituitary following destruction of thymus by Röntgen irradiation, III, 580.
- See also Morrison, J. L.
- Shdanov, A., splitting of nuclei by cosmic rays at altitudes according to observations conducted with the help of photographic plates with a thick layer, I, 236.
- Shallow tracks [produced] by cosmic rays, I, 296.
- Disintegration of nuclei by cosmic rays, I, 399.
- Cosmic-ray burst of a hundred particles, I, 400.
- Shower of heavy particles, I, 446.
- and Missovski, L., detection of recoil nuclei in bombardment of uranium with neutrons, I, 444.
- Missovski, L., and Missovskaja, M., tracks of recoil nuclei in the disintegration of uranium by neutrons, I, 444.
- See also Missovski, L.
- Shdanov, G. S., and Sevastianov, N. G., X-ray analysis of the crystal structure of Na_2BeF_4 , I, 306.
- Shdanov, V. V., and Zilberman, D. E., determination of small amounts of oxygen in gases, with the aid of cuprous chloride, I, 156.
- Shea, F., and Watts, C. E., Dumas method for [determining] organic nitrogen, II, 397.
- Shead, A. C., angular constants of microcrystalline profiles and silhouettes in the conclusive identification of substances; octagons of a cinchophen hydrochloride hydrate and of silver dichromate, I, 98.
- Shear, M. J., carcinogenesis. VII. Compounds related to 3:4-benzpyrene, III, 845.
- and Lorenz, E., carcinogenesis. VI. Hydrocarbon-cholesterol pellets in albino mice, III, 845.
- Sheard, C. See Roth, G. M.
- Shearer, W. N. See Friedman, Leo.
- Shechter, F. R. See Mazer, C.
- Sheket, H. A., and Price, A. E., fatal granulocytopenia following administration of sulphanimide, III, 610.
- Shedlovsky, T., equation for transference numbers, I, 83.
- and MacInnes, D. A., determination of activity coefficients from the potentials of concentration cells with transference. V. Lanthanum chloride at 25°, I, 144.
- See also Belcher, D., and Maron, S. H.
- Sheehan, H. L., obstetric shock, III, 143.
- and Murdoch, R., post-partum necrosis of the anterior pituitary, III, 576.
- See also Herrick, J. F.
- Sheel, P. See Day, J. N. E.
- Sheen, R. T., and Kahler, H. L., effect of ions on the Mohr method for chloride determination; hydrogen peroxide modification for sulphite elimination, I, 95.
- Sheffield, F. M. L., micurgical studies on virus-infected plants, III, 530.
- Sheibley, F. E., 6:8-dichlorobenzoylene-carbamide and the interaction of 5:7-dihalogenoisatoic anhydrides with ammonia; new reagent for sodium, II, 177.
- Shekun, L. See Rubinstein, D.
- Sheldon, C. P., physiology of respiration in pregnancy; effects of barbiturates administered during labour, III, 367.
- Sheldon, D. See Kinsman, G., and Out-house, J.
- Sheldon, J. M. See Conn, J. W., and Johnston, M. W.
- Sheldon, W., and Hall, M., apple treatment of infantile diarrhoea, III, 593.
- Shelley, H. J., allergic manifestations with injection treatment of varicose veins, III, 866.
- Shelling, D. H., and Anderson, G. M., relation of rickets and vitamin-D to incidence of dental caries, enamel hypoplasia, and malocclusion in children, III, 291.
- See also Blumberg, H.
- Shellow, H., dermatitis due to style of hair-dress, III, 1094.
- Shellshar, J. L., brain of a girl, aged 12, said to be that of an aboriginal Australian, III, 347.
- Shelton, E. K. See Payne, S. A.
- Shelton, J. R. See Raitford, L. C.
- Shemin, D., and Herbst, R. M., synthesis of *dl*- β -cyclohexylalanine, II, 504.
- Shen, T. C. R., benzene-adrenaline ventricular fibrillation and methods of prevention, III, 377.
- Site of stimulating action of several drugs on melanophore hormone secretion from hypophysis of frog, III, 577.
- Mechanism of action of melanophore-expanding drugs and its relationship to hypophysis, III, 907.
- Role of light in action of drugs on hypophyseal melanophore hormone secretion of frogs (*Rana temporaria*), III, 907.
- and Hauss, W. H., effect of dinitrophenol, dinitroresol, and *p*-dinitrophenol on chemo-receptors of the carotid sinus [and on respiration], III, 968.
- See also Donatelli, L., Grimson, K. S., and Hauss, W. H.
- Shennan, R. J., quinaldinic acid as a reagent for copper, zinc, and cadmium, I, 157.
- Shenstone, A. G., first spark spectrum of platinum, I, 112.
- Shepardson, H. C., and Friedlander, R. D., long-acting insulin in ambulatory diabetic patients, III, 262.
- and Shapiro, E., diabetes of bearded women; adrenal cortex in carbohydrate metabolism, III, 581.

- Shepherd, E. S., gases in rocks, and related problems, I, 225.
- Shepherd, M., determining uniformity of temperature in cryostats, I, 159.
- Shepherd, M., and Linn, D. R., evaluation of vitamin-F, III, 170.
- Shepherd, M. L. See Bernstein, S. S., and Munday, B.
- Shepherd, W. G., Haxby, R. O., and Williams, J. H., γ -rays from boron and beryllium under proton bombardment, and from lithium under deuteron bombardment, I, 293.
- Sheppard, Margaret, and McHenry, E. W., physiological properties of ascorbic acid. III. Effects on water balance and body composition of guinea-pigs, III, 704.
- See also Fidler, E.
- Sheppard, S. E., Lambert, D. H., and Walker, R. D., optical sensitising of silver halides by dyes. I. Adsorption of sensitising dyes. II. Mechanism of optical sensitising and the quantum equivalent, I, 315, 480.
- Sherk, K. W. See Specht, H. E. M.
- Sherman, H. C., Campbell, H. L., and Lanford, C. S., relation of nutrition to composition of the body and length of life, III, 398.
- See also Campbell, H. L., and Lanford, C. S.
- Sherman, J., heats of hydrogenation of unsaturated hydrocarbons, I, 201.
- and Ketelaar, J. A. A., carbon-chlorine bond in the substituted ethylenes and benzenes, I, 406.
- Sherman, W. B. See Stull, A.
- Sherr, R. See Delsasso, L. A.
- Sherratt, G. G., and Griffiths, E., hot-wire method for thermal conductivities of gases, I, 159.
- Sherrill, J. W. See MacKay, E. M.
- Sherry, S. See Ralli, E. P.
- Sherwood, C. R. See Drill, V. A.
- Sherwood, R. M., and Fraps, G. S., constituents of wheat gray shorts which prevent slipped tendons, III, 72.
- See also Couch, J. R.
- Sherwood, T. C., oestrogenic substance, thyroid function, and respiratory metabolism, III, 376.
- Sheshan, P. A., determination of fats in biological material. II. Alkali hydrolysis method, III, 440.
- Shettles, L. B., effect of ultra-violet light and X-rays on *Peranema trichophorum*, III, 194.
- See also Hellman, L. M.
- Shewan, J. M., trimethylamine formation in relation to the viable bacterial population of spoiling fish muscle, III, 523.
- Shiba, H., Inoue, T., and Miyasaka, R., electrolytic reduction of nitrobenzene in liquid ammonia, II, 306.
- Shiba, K., probable values of e , e/m , and h , III, I, 6.
- Shibata, N., equilibrium diagram of the copper-antimony system. II. Constitution of copper-rich antimony-copper alloys, I, 138.
- See also Murakami, T.
- Shibata, R., Sasa, T., and Umejima, H., thioindigo synthesis. V. Nitro-derivative of 6:6'-dichloro-4:4'-dimethylthioindigo, II, 386.
- and Umejima, H., thioindigo synthesis. IV. Synthesis of 5:6:5':6'- and 6:7:6':7'-tetrachloro-4:4'-dimethylthioindigo, II, 386.
- Shibata, S. See Asahina, Y.
- Shibata, Y., Noguchi, K., and Kaneko, O., volcanoes of Japan. IX. Determination of proportion of heavy water in spring water found in neighbourhood of the Asama volcano, I, 540.
- Shibata, Z., and Kitagawa, H., thermal diffusion of water vapour-hydrogen mixtures, I, 312.
- and Niwa, K., vapour pressure of solid salts. I. Vapour pressure of mercuric halides and thermodynamic calculations, I, 311.
- Shibuya, S. I., mechanism of creatine formation. II. Production of creatine from guanido-compounds; significance of guanidomalonic acid, III, 707.
- Shida, K., changes of protein and colloid osmotic pressure of renal blood. II. Influence of venesection and blood transfusion. III. Influence of diuretics, III, 649.
- Influence of large amounts of water on serum-protein and colloid osmotic pressure in health, hypertension, and renal disease, III, 652.
- Changes of protein and colloid osmotic pressure in arterial and venous blood of kidney. I. Healthy and damaged kidneys, III, 652.
- Shida, S., photochemical decomposition of ammonia, I, 378.
- Shields, J. B., Mitchell, H. H., and Ruth, W. A., metabolism and retention of lead in growing and adult rats, III, 413.
- Shiels, D. O., determination of lead in small quantities of urine, III, 276.
- Shigatsch, K. F., Reh binder, P. A., and Edelman, G. G., influence of surface-active substances on structure formation in gelatin sols, I, 259.
- Shigley, J. R. See Kennedy, W. L.
- Shih, J. W., and Chai, T. Y., powder patterns on permalloy crystals, I, 456.
- Shiina, S., synthesis of *n*-eicosanedicarboxylic acid, $\text{CO}_2\text{H} \cdot (\text{CH}_2)_{18} \cdot \text{CO}_2\text{H}$, and *n*-docosanedicarboxylic acid, $\text{CO}_2\text{H} \cdot (\text{CH}_2)_{20} \cdot \text{CO}_2\text{H}$, II, 404.
- Shiller, M. See Hynes, W. A.
- Shima, I., effect of irradiated perfusates of frog hind limbs and rabbit ear on pigment movements of the frog retina, III, 574.
- Influence of various hormones on retinal pigment movements after prevention of adrenaline secretion, III, 836.
- Shima, K., value of the second dissociation exponent of phosphoric acid and effect of various factors. I. Dissociation constant of phosphoric acid. II. Determination of the dissociation constant of a weak acid, I, 262.
- Shimada, H., constituent of the cortex of *Fraxinus sieboldiana*, Blume (Oleaceae), III, 834.
- Shimada, K., influence of *N*, *M*, and *J* bacteria on *M* and *N* agglutinogens of human red corpuscles, III, 961.
- Shimada, T., benzaldehyde reaction of deoxycholic acid, II, 21.
- Determination of deoxycholic acid, II, 236.
- Shimadzu, S., arrangement of the micro-crystals of silver bromide electro-deposited on the anode silver plate, I, 553.
- Shimamura, M., effect of copper on blood-sugar, III, 555.
- Shimasaki, K., fibrinogen in the non-coagulated blood of sudden death, III, 10.
- Shimer, S. R., chicken blood [in disease], III, 893.
- Shimizu, M., fat-soluble vitamins of *Staphylococcus pyogenes aureus*. I. Effect on growth of albino rat. II. Prevention of rat keratomalacia by *S. pyogenes aureus*. III. Antirachitic vitamin in *S. pyogenes aureus*, III, 163.
- See also Ochiai, E.
- Shimizu, T. See Kazuno, T.
- Shimkin, M. B., production of lung tumours in mice by intratracheal administration of carcinogenic hydrocarbons, III, 697.
- Factors influencing carcinogenesis with methylcholanthrene. I. Effect of age, III, 989.
- See also Andervont, H. B., and Edwards, R. A.
- Shinano, S., nutritional chemistry of flowers. III. Protein in *Wistaria* flowers, III, 1112.
- and Morimoto, M., nutritional chemistry of flowers. II. Composition of cauliflower and vitamins in flowers of double cherry, rape, and cauliflowers, III, 212.
- Shindo, M. See Kimura, S.
- Shingu, H., chelate structure of oo' -di[hydr]oxyazobenzene in solution, I, 449.
- Tautomerism of *p*-hydroxyazo-compounds, II, 257.
- Action of ammonia on anthraquinone in presence of reducing agents. I and II, 433.
- Shinn, L. A. See Nicolet, B. H.
- Shinn, L. E., Main, E. R., and Mellon, R. R., anticalase activity of sulph-anilamide. II. Relation to growth inhibition in pneumococcus. III. Oxygen tension and bacteriostasis in pneumococcal cultures, III, 410, 1080.
- See also Main, E. R.
- Shinohara, J., effects of antipyretics on production of agglutinin, III, 93.
- Shinohara, K., photometric micro-determination of iron, I, 279.
- Accuracy of iodometry for determination of ascorbic acid; method for standardisation of preparations, II, 462.
- Shinowara, G. Y., and Brown, J. B., fatty acids. IV. Purification of linolenic acid by fractional crystallisation of the fatty acids of linseed and perilla oils: properties of this acid prepared by crystallisation and by debromination, II, 4.
- Shioiri, M., and Mitui, S., micro-determination of bivalent iron in rocks and silicate minerals, I, 41.
- Shipley, W., and Rogers, M. T., production of ethane, quinhydrone, and potassium cupric cyanide by a.c. electrolysis, I, 530.
- Electrolysis of organic compounds with alternating current, I, 572.
- Shipley, R. A., and Long, C. N. H., ketogenic activity of the anterior pituitary gland. I. Relation of ketonæmia to ketonuria in the rat. II. Assay of the ketogenic activity. III. Nature of the ketogenic principle, III, 136.
- Shipley, R. H. See Bassett, H.
- Shirahama, K. See Takahashi, E.
- Shiraishi, S. See Suzuki, T.
- Shirakawa, Y., longitudinal magneto-resistance effect at various temperatures in iron-silicon alloys, I, 251.
- Longitudinal magneto-resistance effect at various temperatures in iron-nickel alloys, I, 465.
- Longitudinal magneto-resistance effect at various temperatures in iron-cobalt alloys, I, 465.
- Shire, E. S., and Barkla, H., heating of iron ammonium alum by alternating magnetic fields at very low temperatures, I, 554.

- Shires, E. B. S., *jun.* See Clark, B. B.
- Shirley, R. G. See Hodes, H. L.
- Shirley, R. L., and Vanlandingham, A. H., determination of uric acid in excrements of birds, III, 1114.
- Shishido, H. See Goto, K.
- Shitkova, L. A., Scheverdina, N. I., and Kotscheschkov, K. A., synthesis of organic compounds of bismuth, II, 292.
- Shive, J. W. See Wadleigh, C. H.
- Shiveley, F. L. See Higgins, C. C.
- Shivotinski, P. B., and Zaretzki, S. A., electrolytic preparation of manganese, I, 1, 480.
- Shmuk, A., and Gusseva, A., active concentrations of acenaphthene inducing alterations in processes of cell division in plants, III, 883.
- Shock, N. W., Ogden, E., and Heck, K., probable error of blood pressure measurements, III, 896.
- See also Ogden, E., and Soley, M. H.
- Shockley, W., surface states associated with a periodic potential, I, 552.
- See also Steigman, J.
- Shoenberg, D., magnetic properties of superconductors, I, 66. Superconducting colloidal mercury, I, 257. Magnetic properties of bismuth. III. Further measurements on the de Haas-van Alphen effect, I, 359.
- Shohl, A. T., physiology and pathology of vitamin-D, III, 168.
- and Butler, A. M., citrates in treatment of infantile rickets, III, 923.
- Shoji, R., [effects in man of oxygen lack and carbon dioxide excess], III, 564.
- Shonka, F. R., existence of penetrating neutral particles, I, 174.
- Shonle, H. A. See Doran, W. J., and Eckler, C. R.
- Shookhoff, M. V. See Westheimer, F. H.
- Shoppée, C. W. See Burton, H.
- Shore, R. See McGuire, J.
- Shorr, E. See Barker, S. B., and Papanicolaou, G. N.
- Short, A. G., and Read, John, thujone series. I. Thujones and thujyl alcohols and thujylamines. II. Catalytic hydrogenation of *d*-sabinol. III. Sabina ketone, II, 79, 381, 515. Menthone series. XVI. (*d*-neo)isopulegol, II, 483.
- Short, C. L. See Allen, J. G.
- Short, D. M. See Grimm, P. D.
- Short, J. J., extreme obesity followed by therapeutic reduction of 239 lb., III, 297.
- and Currence, J. D., attempt to mobilise lipins from storage depots by deep massage and increased tissue temperatures, III, 406.
- and Johnson, H. J., comparison of reactions of human system to tobacco smoke and adrenaline, III, 510.
- Johnson, H. J., and Ley, H. A., *jun.*, effects of tobacco smoking on health, III, 510.
- Short, W. F. See Lockett, J.
- Shorter, A. J. See Cox, E. G.
- Shortley, G. H., interpretation of molecular spectra and study of molecular spectra in celestial objects. VI. Continuous spectra, I, 354.
- and Fried, B., structure of the configurations of high azimuthal quantum number in Cu II and the rare gases, I, 1. Theory of complex spectra, I, 2.
- Shortt, H. E., Hawley, H., and Swaminath, C. S., iron-haematoxylin staining technique, III, 1.
- Shortt, H. E., Pandit, C. G., and Rao, R. S., virus of sandfly fever in culture, III, 208.
- Shotton, J. A. See Shriner, R. L.
- Shoupp, W. E. See Kruger, P. G.
- Shourie, K. L., survey of diet and nutrition in Najafgarh, Delhi province, III, 917.
- Shrader, E. L. See Barker, P. S.
- Shrader, S. A., and Ritzer, E., micro-distillation apparatus with receiver for distilling under reduced pressure, I, 225.
- Shreve, R. N., Watkins, C. H., and Browning, J. C., determination of strontium in the presence of calcium, I, 337.
- Shrewsbury, C. L. See Johnson, D. L.
- Shriner, R. L., Gross, M., and Dobratz, E. H., di(carbethoxymethanesulphonyl)dialkylmethanes, II, 492.
- and Greenlee, S. O., activity of methylene group in the isomeric *p*-tolyl mononitrobenzylsulphones and in *p*-tolyl 2,4-dinitrobenzylsulphone, II, 418.
- and Hickey, J. H., urethanes as local anesthetics. V. Alkyl γ -diethylaminopropylcarbamates, II, 248.
- Matson, E. J., and Damshroder, R. E., derivatives of coumaran. IV. Structure of tectorigenin, II, 518.
- and Moffett, R. B., halogen-substituted benzopyrylium salts, II, 385.
- Rendleman, H. A., and Berger, A., synthesis of potassium and sodium γ -hydroxyoctane- α -sulphonate, II, 355.
- Shotton, J. A., and Sutherland, H., anomalous mutarotation of salts of Reychler's acid. VI. Synthesis and structure of the sultam of 2-*N*-methylamino-*d*-camphane-10-sulphonic acid, II, 29.
- and Witte, M., derivatives of coumaran. V. Synthesis of 4-hydroxycoumaran-3-one, II, 518.
- Shrivastava, D. L. See Linton, R. W.
- Shuchovitzki, A. A., Zabeshinski, J. L., and Seminski, D. S., dynamics of sorption, I, 518.
- Shuey, P. F., and Darbaker, L. K., colour evaluation, I, 159.
- Shukers, C. F., Langston, W. C., and Day, P. L., normal blood picture of the young rhesus monkey, III, 113.
- See also Langston, W. C.
- Shukov, I. I., and Dneprov, G. F., transport number, conductivity, and viscosity of solutions of hydrogen chloride in mixed solvents, I, 324.
- Shukov, N. I., inheritance of nicotine and anabasine in inter-specific hybrids, *Nicotiana rustica*, L., \times *N. glauca*, Grah., III, 801.
- Shulman, I. See Mulinos, M. G.
- Shulman, N. See Loudon, J. D.
- Shumway, N. P. See Hayman, J. M., *jun.*
- Shuravel, P. V. See Tschapek, M. V.
- Shuravlev, A. M. See Vassiliev, B. B.
- Shuravlev, D., solubility of potassium chloride in antimony trichloride, I, 607.
- Shuravlev, E. F., homogenisation of metastable stratification in the ternary system: anthranilic acid-water-pyridine, I, 265. Application of physico-chemical analysis to study of the equilibrium of liquid phases in three-component systems. I. Equilibrium of liquid phases in the system acetic acid-aniline-light petroleum, I, 473.
- See also Mertzlin, R. V.
- Shurnik, L., and Suhonen, P., determination of vitamin-A and carotene in organs, III, 601.
- Shusett, H. M. See Foss, N. E.
- Shute, E., determination of oestrogenic substance in blood serum by estimation of antiproteolytic power of the serum, III, 56. Cycle of responsivity of castrated albino mice and of human beings to oestrone injection, III, 479. Diagnosis and treatment of common disorders of menstruation, III, 583. Persistence of oestrogens in the blood after the menopause, III, 685. Clinical and veterinary uses of wheat-germ oil and vitamin-E preparations. II. Diagnosis and treatment of vitamin-E deficiency, III, 1074.
- Shute, P. G. See Sinton, J. A.
- Shutt, W. J. See Carr, W.
- Sia, R. H. P., β -hamolytic streptococcus. I. Technique of serological classification (Griffith), III, 527.
- See also Wu, C. J.
- Sibaiya, L., scattering of light in a Rochelle salt crystal, I, 132. Self-reversal of spectral lines, I, 290.
- and Rao, M. R., molecular oscillation frequency in viscosity and Raman effect, I, 179. Surface tension and Lindemann frequency, I, 406. Temperature dependence of Lindemann frequency, I, 599.
- and Subbaraya, T. S., Zeeman effect of hyperfine structure in intermediate fields, I, 290.
- and Venkataramah, H. S., Raman effect in samarium nitrate solutions, I, 550.
- Sibilia, D., effect of autonomic drugs on experimentally produced Smith-Pardee monophasic curves in rabbits, III, 235.
- Sibirjakov, M. A. See Bruevich, S. W.
- Sibul, I., effect of respiration on the blood flow through the isolated lungs, III, 461.
- Sibuya, H., regeneration of blood-protein and colloid osmotic pressure. I. Experiments on starving rabbits. II. Influence of hormones after plasmapheresis. III. Effect of ligation of pancreatic duct. IV. Effect of autonomic drugs, III, 452, 743. Influence of narcotics, naphthylamines, and picrotoxins on restoration of blood-protein and the colloid osmotic pressure after plasmapheresis, III, 652.
- Sichler, R., case of Addison's disease due to trauma, III, 261.
- Siday, R. E., radiobromine, I, 397.
- Siddall, R. S., and Mack, H. C., weight changes and toxæmia of late pregnancy, III, 481.
- Siddappa, S. See Manjunath, B. L.
- Siddiqui, S. See Sharma, V.
- Sideris, C. P., and Krauss, B. H., growth phenomena of pineapple fruits, III, 436.
- Young, H. Y., and Krauss, B. H., distribution of uncombined hexosamine in pineapple plants supplied with either ammonium sulphate or calcium nitrate salts, III, 107.
- Sidhu, S. S., X-ray investigation of the form of acetylsalicylic acid in certain sugars, I, 16. X-Ray study of menthol, I, 186.
- and Berger, J. A., density of single crystals of cupric acetate monohydrate, I, 363.
- Sidorov, N. I. See Spitzin, V. I.
- Sidorov, S. See Komar, A.
- Sidorova, N. G. See Tzukurvanik, I. P.
- Sidwell, A. E. See Johnson, Warren C.
- Sidwell, A. E., *jun.* See Altschul, A. M.
- Siebenmann, C., bacterial growth in presence of silver foil, III, 433.
- Sieber, J. See Weibke, F.
- Siebert, H., reduction of aconitic acid at the dropping mercury cathode, II, 140.

- Siebert, W. W., and Seffert, H., mitogenetic radiation from blood; extinction of the radiation in disease, III, 784.
- Siecke, H. See Kohlschütter, H. W.
- Sieckmann, W. See Kreitmar, H.
- Siedek, H., thyroidectomy in heart and circulatory diseases, III, 1049.
- Siedek, H., therapy of acute cardiac insufficiency, III, 183.
- and Reuss, L., action of nicotinic acid amide in disturbances of fat absorption, III, 704.
- and Riedl, I. P., physical examination of the circulatory system in hypertension, III, 704.
- Siedel, W., and Möller, Hans, mesobilifuscin, a degradation product of hæm or hæmatin. I. Constitution and partial synthesis, II, 393.
- See also Meldolesi, G.
- Siedentopf, H., microscopic examination of gratings with irregularities, I, 454.
- Siegal, S. See Adlersberg, D.
- Siegel, J. See Smith, A. R.
- Siegel, L., Allen, R. M., McGuire, G., and Falk, K. G., study of normal and rachitic bone structure by microphotographic methods, III, 888.
- Siegel, M., active immunisation against whooping cough with specific vaccines, III, 1101.
- Siegel, R., chest leads in electrocardiography, III, 821.
- Siegert, H. J. See Haberland, G.
- Siegfried, B. See Eder, R.
- Siegl, J., treatment of acute poliomyelitis, III, 180.
- Siegler, S. L., oestrogenic and chorionic gonadotropic hormone in normal pregnancy and toxæmia of pregnancy, III, 1053.
- Siegmund, B., action of pervitin on the accuracy of Widmark's blood-alcohol test, III, 714.
- Siegrist, B. See Briner, E.
- Sielig, M. G., and Benignus, E. L., lung tumour development in a resistant strain of mice, subjected to inhalation of soot, III, 491.
- Siemonsen, H., heats of formation of oxides of manganese, I, 524.
- Sieper, F., glass tubing systems, I, 161.
- Siering, O. See Böhme, H.
- Sievers, K., Neumayer, R., and Depper, R., substances in pregnancy urine stimulating vaginal contraction, III, 687.
- Sievers, R. F. See McIntyre, A. R.
- Sieverts, A., Zapf, G., and Moritz, H., solubility of hydrogen, deuterium, and nitrogen in iron, I, 16.
- Siewert, G. See Mannich, C.
- Sigalovskaja, K. K. See Gurevitch, V. G.
- Sigetomi, S., solubility of sodium amide in liquid ammonia, I, 252.
- Sigilló, G. See Ajello, T., and Cusmano, S.
- Sigmar, J. See Kaunitz, H., and Reuss, L.
- Sigwald, J. See Mollaret, P.
- Sihn, T. S., photochemistry of bile acids. III. Ultra-violet irradiation of apocholic, dihydroxycholenic, and isodihydroxycholenic acid, II, 160.
- and Kim, C. H., composition of bile of fish, III, 66.
- See also Ashikari, H., and Kim, C. H.
- Sihvonen, V., relation between temperature and current density at constant overvoltage and significance of change of potential at constant current density, I, 325. Reactions [taking place] on carbon, I, 531. Mechanism of carbon combustion on the carbonyl group theory, I, 570.
- Sihvonen, V., and Hemming, U., carbon as adsorbent, I, 365.
- and Jarvinen, J., oxidation of carbon at atmospheric pressure, I, 36.
- and Nasanen, R., oxidation of a graphite electrode in very dilute water vapour in the glow discharge, I, 619.
- and Sarkamies, P., gas development at a graphite electrode after opening the circuit, I, 34.
- Sikinami, Y. and Hosokawa, H., increase of sugar in skin and decrease of glycogen in liver after administration of fat, III, 771.
- Siksnas, R. See Ritschl, R.
- Sikuma, K. See Sendju, Y.
- Silaeva, E. A. See Eichman, R. K.
- Silberberg, M., and Silberberg, R., effects of anterior pituitary implants and extracts on epiphyses and joints of immature female guinea-pigs, III, 136. Growth processes in cartilage and bone subsequent to gonadectomy and administration of anterior pituitary extract of cattle in immature male and female guinea-pigs, III, 684.
- Silberberg, R. See Silberberg, M.
- Silbereisen, K., micro-organisms as colloid disperse systems, III, 788. Glycogen formation as first phase in alcoholic fermentation, III, 872. Nature, action, and importance of co-enzymes, III, 941.
- Silberg, A., 2-methyl-7:8-benzoquinoline-4-carboxylic acid, II, 283.
- Silberman, T. J. See Poehil, P. F.
- Silberpfennig, J., problem of eye movements. II. Recovery from bilateral gaze paralysis, III, 830.
- Silberstein, A., crystallographic study of the double copper potassium bromide, I, 600.
- Silberstein, A. G., xeroderma pigmentosum with mental deficiency, III, 1037.
- Silberstein, L. See Bertrand, G.
- Silberstein, M. A., [structure of] double copper ammonium bromide, I, 513.
- Silbert, S. See Friedlander, M.
- Silcocks, C. G., and Travers, M. W., determining rate of chemical reactions in the gas phase, I, 326.
- See also Carter, A. G.
- Silfverskiöld, B. P., capillaries and hæmorrhage, III, 20. Blood volume and blood distribution, III, 116.
- Silin, N. F., and Moschtschinskaja, N. K., Kolbe-Schmidt synthesis. I. Mechanism of formation of 2:3-hydroxynaphthoic acid, II, 66.
- Sillars, R. W., behaviour of polar molecules in solid paraffin wax, I, 181.
- Sillén, L. G., X-ray investigation of $\text{LiBi}_2\text{O}_4\text{Cl}$ and related substances, I, 457. Theory of diffusion potential; stationary diffusion and Henderson distribution, I, 474.
- and Aurivillius, B., mixed oxide phases with an incomplete oxygen lattice, I, 412.
- See also Ehrensvar, G.
- Sillitto, A. G., release of air dissolved in water, I, 314.
- Silva-Lafrentz, C., action of respiratory catalysts on cultures of embryonal and tumour tissue, III, 847.
- Silva-Mello, yaten in treatment of intestinal diseases, III, 931.
- Silver, A. L. L., treatment and prevention of industrial diseases in filling factories, III, 95.
- Silver, B., and Elliott, M., use of sulphanilamide in 1625 cases of gonorrhœa in the male, III, 610.
- Silver, H. B., spontaneous pneumothorax in the newborn, III, 1034.
- See also Levy, Julius.
- Silverman, L., and Williams, Charles R., increasing the portability of the Bausch and Lomb dust counter, I, 282.
- Silverman, M., and Werkman, C. H., bacterial synthesis of cocarboxylase, III, 428, 993. Function of vitamin-B₃ in anaerobic bacterial metabolism, III, 1099.
- Silverthorn, R. W. See Brode, W. R.
- Silvestre, J. L., clinical value of Becher's xanthoproteic reaction [on blood], III, 119.
- Silvestroni, E., histological study of correlations between pituitary, adrenals, gonads, and thyroid, III, 575.
- Silvette, H., and Britton, S. W., renal function in the opossum and the mechanism of cortico-adrenal and post-pituitary action, III, 274.
- See also Britton, S. W.
- Simada, T., changes in bone after administration of fluorine, III, 887.
- and Hata, K., synthesis of 4:5-dihydroxydiphenylene oxide, II, 384.
- Simakova, T. L., stimulant for anaerobic decomposition of cellulose, III, 328.
- Simamura, O., isomerisation of dimethyl maleate by hydrogen bromide and by hydrogen chloride, II, 139. Isomerisation of methyl allocinnamate by hydrogen bromide and the influence of oxygen, II, 477.
- See also Urushibara, Y.
- Simanovskaja, A. A. See Schorigin, P. P.
- Simard, G. L. See Beattie, J. A.
- Simchen, A. E. See Bobtelsky, M. M.
- Simcox, W. J. See Pierce, H. B.
- Simeone, F. A., and Maes, J. P., sensitisation of submaxillary gland by sympathetic denervation, III, 841.
- See also Rosenblueth, A.
- Simesen, M., fate of cobalt after oral administration, III, 934.
- Simha, R., transport phenomena in the cage model of liquids, I, 249, 558.
- See also Eirich, F.
- Simici, D., effect of hæmatoporphyrin on gastric motility, III, 483.
- Siminovitch, D., and Scarth, G. W., mechanism of frost injury to plants, III, 532.
- Simizu, A., paragglutination and mutabile variation of the *Bacterium coli mutabile* in single cell culture, III, 629.
- Simkins, C. S. See Reinberger, J. R.
- Simmons, K., growth of well children: analysis of stature and weight, 3 months to 13 years, III, 345.
- Simokawa, S., clitoris bone, III, 642.
- Simola, P. E., metabolism of pyruvic acid in the animal organism, III, 174. Non-enzymic methylene-blue reduction by pyruvic acid and pyruvic acid aldol, III, 516. Relationship between vitamin-B [complex] and ketone metabolism, III, 919.
- and Alapeuso, H., metabolism of pyruvic acid in brain tissue, III, 501. Biological formation of citric acid, III, 501.
- Simon, Alexander, pharmacology of the vasoconstrictor substances in blood-serum, III, 458, 929.

- Simon, *Alexander*, and Komlós, *A.*, vasoconstrictor substances from serum and blood, III, 459, 897.
- Vidos, *A.*, and Weiner, *P.*, effect of the oxytocic hormone on blood-sugar, III, 48.
- Simon, *Alfred*. See Schmidt, *O. T.*
- Simon, *Arthur*, Raman effect and its applications in inorganic chemistry. XIV., I, 58.
- [with Reuther, *H.*, and Kratzsch, *G.*], Raman-spectroscopic investigations. XIII. Structure of perchloric acid, I, 9.
- Simon, *P.* See Chaliel, *J.*
- Simon, *Franz*. See Bleaney, *B.*, Cooke, *A. H.*, Kürti, *N.*, and Rollin, *B. V.*
- Simon, *F. A.*, and Lotspeich, *E.*, sensitivity to poison ivy, III, 1006.
- See also Loveman, *A. B.*
- Simon, *I.*, determination of fluorescence in urine with reference to cancer and other diseases, III, 987.
- Simon, *I.*, osmotic pressure of organs. X. Variations in osmotic pressure of organs at varying periods after intravenous injection of hypertonic solutions of methyl and ethyl alcohols and glycerol. XI. Hexamethylenetetramine, urea, glucose, and sucrose. XII. Osmotic pressure of blood and organs at different periods after intravenous injection of pharmaceutical substances, III, 421, 515. Sodium sulphide as antidote to mercuric chloride, III, 509. Antidotal action of sodium sulphide against mercury poisoning, III, 715. Change in toxicity of lead nitrate solutions with age, III, 715. Antidotes for quinine. I. Sodium chloride. II. Sodium sulphate. III. Disodium phosphate. IV. Tannic acid, III, 716. "Delayed," minimal lethal, intravenous dose of sodium salts; comparative toxicities of various anions, III, 716.
- Simon, *J.* See Urbánski, *T.*
- Simon, *P.* See Bettley, *F. R.*
- Simon, *R.* See Watson, *W. W.*
- Simon, *S. D.* See Schiff, *L.*
- Simon, *W.*, thermolysis of glutin, II, 234.
- Simonart, isomerides of acetyl- β -methylcholine, III, 84.
- See also Helderweirt, *G.*
- Simonart, *P.* See Oxford, *A. E.*
- Simonberg, *A.* See Heppner, *B.*
- Simonds, *A. O.*, dioxan dehydration for paraffin-embedded *Fucus* slides, III, 890.
- Simonelli, *M.*, and Marri, *R.*, toxicity and therapeutic application of methyl *p*-hydroxybenzoate, III, 1000.
- Simonet, *M.*, hereditary character of tetraploid mutants of *Petunia* obtained after treatment with colchicine, III, 341.
- and Armenzoni, *F.*, anomalies of mitosis due to action of iodo-derivatives of cyclic hydrocarbons, III, 1018.
- and Guinochet, *M.*, effects due to 1-chloro- and 1-bromo-naphthalene comparable with those of colchicine on plant mitoses, III, 801. Comparison of effect of substances causing abnormal mitosis on wheat and flax, III, 883. Production of polyploid cells in plant tissues by vapour of *p*-dichlorobenzene, III, 883.
- Simonetta, *B.*, and Magnoni, nervus terminalis and organ of Jacobson in Chiroptera, III, 738.
- Simonić, *I.*, anatomy of the heart of the carnivores, III, 223.
- Simonnet, *H.*, and Michel, *E.*, nature of [gonadotropic] anti-hormones, III, 434. Action of anti-gonadotropic sera on immature mouse, III, 973.
- and Robey, *M.*, physiology of the corpus luteum: (I) of pregnancy; (II) of menstruation, III, 587. Le corps jaune; étude biologique, chimique, et thérapeutique [biological, clinical, and therapeutic aspects of the corpus luteum], III, 1114.
- See also Azérad, *E.*, Claude, *H.*, and Laroche, *G.*
- Simons, *H.* See Nicholle, *P.*
- Simons, *J.* See Joranson, *Y.*
- Simons, *J. H.*, glass vapour-density balance, I, 45. Glass-enclosed magnetic stirrer, I, 105. Small, low-temperature rectifying column, I, 106.
- and Archer, *S.*, hydrogen fluoride as condensing agent. II. Alkylation of benzene by olefines. III. Alkylation of aromatic [compounds] with aliphatic halides. VI. Alkylation of benzene with compounds containing an "allylic" group, II, 54, 362.
- Archer, *S.*, and Adams, (*Miss*) *E.*, hydrogen fluoride as condensing agent. IV. Reaction of cyclopropane with benzene, II, 54.
- Archer, *S.*, and Passino, *H. J.*, hydrogen fluoride as condensing agent. V. Reactions of compounds containing oxygen and reactions of tertiary halides with olefines, II, 54.
- and Block, *L. P.*, fluorocarbons; reactions of fluorine with carbon, II, 529.
- Randall, *D. I.*, and Archer, *S.*, hydrogen fluoride as condensing agent. VII. Acylation of aromatic compounds. VIII. Alkylation of benzene by esters, II, 428.
- and Seward, *R. P.*, slow electron scattering and the apparent electron affinity of mercury, I, 51.
- Sloat, *T. K.*, and Meunier, *A. C.*, trichloro-bromo- and -iodo-methane, II, 136.
- See also Bauer, *S. H.*, and Seward, *R. P.*
- Simons, *L.*, neutron-proton scattering cross-section, I, 293. Association of Raman frequencies of less than 1400 cm.⁻¹ with longitudinal vibrations in elongated organic molecules, I, 510.
- Simonsen, *D. G.* See Pottenger, *F. M.*, jun.
- Simonsen, *J. L.* See Baker, *W.*, Carter, *F. D.*, Hill, *Rowland*, Penfold, *A. R.*, Pritchard, *R. R.*, and Ramage, *G. R.*
- Simosato, *Z.* See Asahina, *Y.*
- Simpkins, *S.* See Bernstein, *M.*
- Simpson, *B. W.* See Irving, *J. T.*
- Simpson, *C. T.*, and Chandlee, *G. C.*, *p*-hydroxyphenylarsinic acid as a reagent for titanium and zirconium, I, 101.
- Simpson, (*Miss*) *D. M.*, refractive indices and molecular refractivities of 3-methylcyclohexanone and pulegone, I, 405.
- See also Price, *W. C.*
- Simpson, *E. S.*, new meteorites from Western Australia, I, 107.
- Simpson, *J. C. E.*, triterpene group. V. Oxidation products of the β -amyrin derivative, C₃₀H₄₈OS, II, 331.
- and Williams, *N. E.*, ether-soluble constituents of sarsaparilla root. II., II, 80.
- See also Burrows, *S.*
- Simpson, *M. E.* See Evans, *H. M.*, Jensen, *Hans*, and Li, *C. H.*
- Simpson, *R. M.* See Loeb, *L.*
- Simpson, *V. E.*, strongly iodiasis [treatment with iodine], III, 614.
- Sinclair, *H. M.*, metabolism of vitamin-B₁, III, 919.
- See also Goodhart, *R. S.*
- Sinclair, *M.*, determination of vitamin-B₁ in blood, III, 165.
- Sinclair, *M. W.*, and Thomas, *J. W.*, heterophile antibody determinations in 148 allergic and 107 non-allergic persons, III, 781.
- Šindelár, *V.* See Dubský, *J. V.*
- Sindoni, *A.*, jun., blood-sugar versus urine-sugar, III, 772.
- Sindowski, *K. H.*, weathering of heavy minerals, I, 108.
- Sindram, *I. S.*, Woerd, *L. A. van der*, and De Jongh, *S. E.*, paradoxical effects of follicular hormone in male animals, III, 583.
- Sinelnikov, *K. D.*, Walther, *A. K.*, Gumeniuk, *V. S.*, and Ivanov, *A. V.*, threshold value of the photo-electric disintegration of beryllium, I, 397.
- Walther, *A. K.*, Taranov, *A. J.*, Ivanov, *A. V.*, and Gumeniuk, *V. S.*, absorption of high-energy electrons, I, 394.
- Singer, *E.* See Keller, *R.*
- Singer, *G.*, Taylor, *L. S.*, and Charlton, *A. L.*, concrete as a protective material against high-voltage X-rays, I, 183.
- Singer, *R. B.* See Drabkin, *D. L.*
- Singer-Brooks, *C. H.*, pertussis prophylaxis; comparison of phase I *H. pertussis* vaccine with undenatured bacterial antigen, III, 429.
- Singewald, *Q. D.*, bauxite deposits at Gánt, Hungary, I, 287.
- Singh, *B.*, oxidation of ferrous iron with potassium iodate, I, 219.
- and Singh, *S.*, potentiometric studies in oxidation-reduction reactions. IV. Oxidation with potassium chlorate. V. Oxidation with potassium chlorate. VI. Iodometric determination of organic acids. VII. Determination of aromatic compounds with potassium chlorate, I, 335; II, 566.
- Singh, *B. K.*, space configuration of nitrogen in the 3-covalent state, I, 182. Space arrangements of atoms. I. Configuration of nitrogen in the 3-covalent state, I, 358.
- Singh, *B. N.*, and Jha, *J. D.*, chlorophyll formation and development of photosynthetic activity in young leaves of mango (*Mangifera indica*), III, 534.
- Lal, *K. N.*, and Lal, *M. B.*, influence of artificial fertilisers on the photosynthetic efficiency of *Andropogon sorghum*, III, 800.
- Lal, *K. N.*, and Prasad, *K.*, photosynthetic specificity in relation to biochemical composition of leaves, III, 436.
- Mathur, *P. B.*, and Mehta, *M. L.*, cellulase in potato sprouts, III, 323.
- and Prasad, *S.*, effect of chlorides, in relation to age, an growth and composition of wheat, III, 435.
- and Rao, *N. K. A.*, photo-electric photometer for chemical analysis, I, 104. Photo-electric nephelometer for chemical analysis, I, 280.
- and Rao, *S. R. A. N.*, photosynthetic efficiency of leaves as influenced by variations in pH of the injected solutions, III, 800.
- See also Gatenby, *J. B.*, and Sampath, *S.*

- Singh, G. See Smith, L. W.
- Singh, I., properties of tonic contractions produced by electrical stimulation of anterior retractor of byssus of *Mytilus edulis*, III, 27. Effect of calcium and other factors on excitability of anterior retractor of byssus of *Mytilus edulis*, III, 126. Effect of stretching and stimulation on weight, total base, and sodium concentration of anterior retractor of byssus of *Mytilus edulis*, III, 747. Effect of interaction of ions, drugs and electrical stimulation as indicated by contraction of unstriated muscle, III, 1035.
- Singh, J. See Bhatnagar, S. S.
- Singh, K. M. P., and Dutt, S., dyes derived from chrysoquinone, II, 28.
- Singh, L. See Mukerji, S. K.
- Singh, M., rotatory power and chemical constitution. IV., II, 272.
- Singh, N. See Pal, R. K.
- Singh, S. See Bahl, R. K., and Singh, B.
- Singh, T., visual phenomenon, III, 753.
- Sinha, H. K., local anæsthetic action of pyrazoline compounds, III, 714. Factors influencing duration of local anæsthesia, III, 714.
- Sinma, K., and Yamasaki, F., β -radioactivities of rhenium, I, 170. β -Ray spectra of ^{62}Cu , ^{64}Cu , and ^{66}Cu , I, 231.
- Sinn, F. See Borsche, W.
- Sinnatamby, G. R. See Fernando, P. B.
- Singowitz, U., positions and packing of congruent circles in a plane, I, 456.
- Sinton, J. A., Hutton, E. L., and Shute, P. G., unsuccessful attempts at causal prophylaxis with certuna in malignant tertian malaria, III, 179. Natural resistance to *Plasmodium ovale* infections, III, 628. Acquired resistance to *Plasmodium ovale* infections, III, 792.
- Sirahama, K., brown algæ. VIII. Brown compounds of phosphorus. IX. Brown pigment. X. Brown phosphorus-containing compounds and brown pigments, III, 216, 343.
- Sirajuddin, K. See Khastgir, S. R.
- Sirand, E. See Denoyelle, L.
- Sirdar, J. N. See Bagchi, K. N.
- Sirkar, J. P., specific bacterial action of gur solution unattended by evolution of carbon dioxide, III, 328.
- Sirkin, J. K., vapour pressure of liquids and solids, I, 67. Tension of saturated vapours, I, 248.
- See also Schott-Lvova, E. A., Selivanova, A. S., Vassiliev, V. G., and Volkenstein, V.
- Sirokomski, V. S., and Klimenko, J. V., vanadometry—a new volumetric oxidation method, I, 158.
- Sirotnin, N. N., [effect of body temperature on] reactivity of animals during infection and on anaphylaxis, III, 528. Role of primary reactivity in allergic manifestations, III, 618.
- Sise, H. S., distribution of sulphanilamide and acetylsulphanilamide between cells and extracellular fluid, III, 999.
- Sise, L. F., clinical evaluation of non-volatile anæsthetic drugs, III, 412.
- Sisima, S., relation between histamine and anaphylaxis, III, 506.
- Sisson, W. A., dispersion, electrokinetic and coagulation behaviour of cotton fibres in cuprammonium hydroxide solution, III, 217.
- Sisson, W. A., and Saner, W. R., X-ray diffraction study of swelling action of several quaternary ammonium hydroxides on cellulose fibres, I, 418.
- See also Farr, W. K.
- Sitnikov, M. M., theory of the ion current in the magnetron as applied to production of [beams of] ions, I, 230.
- Sitri, R. See Régner, J.
- Sittkus, A., magnitude distribution of ultraradiation impacts through 10 cm. of iron, I, 399.
- Sivadjian, M. T., chemistry of the vitamins and hormones, III, 73.
- Sivaramakrishnan, M. V., vacuum arc mercury still, I, 582.
- Sivertz, V. See Wright, K. A.
- Siwe, S., physiological basis of citric acid as a therapeutic in early infancy, III, 311.
- Sixsmith, G. See Hammick, D. L.
- Sizer, I. W., temperature activation of the uracae-urea system using crude and crystalline uracae, III, 1096.
- Sizoo, G. J., and Eijkman, C., γ radiation from ^{198}Au , I, 293.
- See also De Vries, J., and Dols, M. J. L.
- Sjöberg, B., epichlorohydrin and hydrogen sulphide, I, 86.
- Sjöberg, K., phosphorus, phosphatase, and cholesterol content of blood in puerperium and puerperal hæmoglobinæmia of cattle, III, 356.
- Sjogren, B., Nordenskjöld, T., Holmgren, H., and Mollerstrom, J., liver rhythm; [glycogen, phosphorus, and calcium in the rabbit liver], III, 485.
- Sjostrand, F., and Sjostrand, T., sinusoidal blood vessels in the lung of the mouse, III, 241. Granular alveolar cell and its functions, III, 808.
- Sjostrand, T., origin of oedema after mechanical irritation of the skin, III, 363.
- See also Asmussen, E., and Sjostrand, F.
- Sjolander, N. O., and McCoy, E., anaerobic bacteria. XIII. Cultural study of some "butyric" anaerobes previously described in the literature, III, 329.
- Sjollem, B., magnesium as a constituent of the animal organism, III, 987.
- Skaggs, L. S., energy released in the production of deuterium from beryllium under proton bombardment, I, 505.
- See also Allison, S. K.
- Skalinski, T., influence of added gas on absorption of 4078 Å. Hg line by selenium vapour, I, 50.
- Skarre, O. K., and Brodski, A. E., concentration of the heavy isotope of oxygen and isotopic analysis of water, I, 274.
- See also Brodski, A. I.
- Skarstrom, C. See Beams, J. W.
- Skarulis, J. A. See Horan, H. A.
- Skarzynski, B., spectrographic examination of flavone pigments, II, 385.
- Skau, E. L., and Bergmann, Werner, unsaturated steroids. IV. Preparation and photochemical oxidation of $\Delta^{2,4}$ -cholestadiene, II, 14.
- See also Bergmann, Werner.
- Skellett, A. M., time lag in gas-filled photoelectric cells, I, 104.
- Škerlak, T. See Klemen, R.
- Škerlj, B., feminine types of bodily form, III, 739.
- Skinner, D. G. See Graham, J. I.
- Skinner, H. A. See Thompson, H. W.
- Skinner, H. T., rooting response of azaleas and other ericaceous plants to auxin treatments, III, 802.
- Skita, A., and Faust, W., determination of the configuration of 1:3-substituted cyclohexanols, II, 365.
- and Rössler, R., methyl and ethyl esters of the stereoisomeric hexahydroisophthalic acids, II, 160. 1:3-Diaminocyclohexane, II, 208.
- Sklar, A. L., and Lyddane, R. H., anti-symmetrical molecular orbitals. II. Calculation of integrals, I, 358.
- See also Sponer, H.
- Skliarenko, S. I., and Baranaev, M. K., influence of films of surface-active substances on rate of evaporation of solutions, I, 415.
- Skobeltzyn, D., abnormal mechanism of diffusion and absorption of β -rays, I, 231. Electronic diffusion of rapid β -rays, I, 231. Normal and abnormal δ -rays, I, 394.
- Skoglund, C. R. See Bernhard, C. G.
- Skolil, L. L., dispersion of water for electromagnetic waves, I, 357.
- Skolnik, E. A. See Nomland, R.
- Skoog, F., Broyer, T. C., and Grossenbacher, K. A., effects of auxin on rates, periodicity, and osmotic relations in exudation, III, 1110.
- See also Bennet, J. P.
- Skopintzev, B. A., organic matter in the waters of the Barentz, Polar, and Kara Seas, I, 495.
- Skow, R. K. See Blinks, L. R.
- Skowron, S., endocrine glands of the hedgehog. I., III, 141.
- and Wienski, Z., life period of corpus luteum and influencing factors, III, 57.
- Skrabal, A., time-law change in formation of chlorate in chlorine bleach liquors, I, 149. Calculation of rates of hydrolysis from constitutional formulae, I, 205. Continuity of kinetics of [reactions in] bleaching liquors, I, 476.
- Zahorka, A., and Weimann, K., velocity of hydrolysis of nitrous esters, I, 204.
- Skrabal, R. See Kohlrausch, K. W. F.
- Skramovsky, S., and Vondrášek, O., double sulphates of bismuth and alkali metals, I, 91.
- Skraup, S., Strieck, F., and Schorn, J., biochemical significance of unsaturated fatty acids, III, 708.
- Skudrzyk, J. See Domański, T.
- Skurnik, L., and Groth, H., vitamin-C in blood and urine after intravenous "saturation," III, 1072.
- See also Groth, H.
- Skvirskaja, E. B., glycolytic power of different parts of the nervous system, with different substrates, III, 251.
- Skvortzov, V. N., chemical reactions of colloidal dissolved substances. V. Theory of the kinetics of chemical reactions between hydrosols and macro-surfaces, I, 75.
- Slack, F. G., and Rudnick, P., optical activity and magneto-optical activity of crystalline nickel sulphate in the near ultra-violet, I, 454.
- See also Anderson, H. L., and Booth, E. T.
- Sladden, D. E., and Hewer, H. R., transference of induced food-habit from parent to offspring. III., III, 66.
- Sladek, J., and Kyer, preparation and properties of the charcoal adsorbate [anti-anæmic principle] of liver extract, III, 228.

- Slansky, C. M., and Coulter, L. V., heat capacity of crystalline tellurium from 15° to 300° K. and the entropy at 298.1° K., I, 247.
See also Blasdale, W. C., and Latimer, W. M.
- Slater, D. W., and Dornfeld, E. J., triple stain for amphibian embryos, III, 890.
- Slater, N. B., rates of unimolecular reactions in gases, I, 202.
- Slatineanu, A., Balteanu, Nitzulescu, J., and Levit, I., intestinal chemistry in pellagra, III, 288.
- and Potop, I., sodium and potassium content of serum and cerebrospinal fluid in pellagra, III, 288. Polypeptide content of blood and cerebrospinal fluid (C.S.F.) in pellagra, III, 288.
- Slavich, E., and Cappelli, P., blood-bilirubin in old age, III, 118.
- Slawsky, M. M. See Duffendack, O. S.
- Slawsky, Z. I., and Dennison, D. M., centrifugal distortion of axial molecules, I, 454. Potential functions of the methyl halides, I, 455.
See also Rarita, W.
- Slawson, C. B., occurrence of large halite crystals, I, 344.
- and Thibault, N. W., quantitative measurement of dichroism in tourmaline, I, 579.
- Sleeth, C. K. See Van Liere, E. J.
- Sletten, E. See Flood, H.
- Sljijer, E. J., comparative anatomy of mammalian penis, III, 642.
- Slisberg, A., pain in amputation stumps and treatment with synthetic vitamin-B₁, III, 602.
- Sliv, L. A., impulse of recoil by β -decay, I, 442.
- Sloan, L. L., instruments and technique for clinical testing of light sense. I. II. Control of fixation in dark-adapted eye. III. Apparatus for studying regional differences in light sense, III, 836, 903.
- Sloane, R. H., and Cathcart, (Miss) E. B., formation of negative ions by negative-ion bombardment of surfaces: a new process, I, 230.
- and Press, R., formation of negative ions by positive ion impact on surfaces, I, 52.
- Sloat, T. K. See Simons, J. H.
- Slobodin, J. M., dihydrothiophen, II, 124. Isomerisation of allene hydrocarbons in presence of silicates. VIII. Isomerisation of α -phenyl- Δ^7 -butinene and α -phenyl- $\Delta^{\alpha\gamma}$ -butadiene, II, 362.
- and Krasnobaeva, P. N., dehydrogenation of 1-vinyl- Δ^3 -cyclohexene, II, 54.
- Slobody, L. B. See Reynolds, M. R.
- Slome, D. See O'Shaughnessy, L.
- Slonimski, P. W., effect of vitamin-C on blood formation and melanophores in amphibian embryos, III, 446.
- Slosse, J., and Jonkovsky, N. I., spectrography of oestradiol, III, 912. Spectrographic demonstration of oestradiol in serum, III, 981.
- Slot, G. M. J., ammonia gas burns, III, 416.
- Slotin, L., and Style, D. W. G., slow oxidation of methane, I, 268.
- Slotta, K. H., and Fraenkel-Conrat, H., crotoxin, III, 1062.
- and Neisser, K., coffee. IV. Elucidation of the constitution of cafesterol, II, 18.
- Slovotschov, I. See Bernscheint, A.
- Sluiter, C. E. See Jordan, H. J.
- Sluys-Veer, F. C. van der. See Ruzicka, L.
- Smadel, J. E., and Farr, L. E., effect of diet on pathological changes in rats with nephrotoxic nephritis, III, 694.
See also Rivers, T. M.
- Small, A. M. See Butt, H. R.
- Small, C. W. See King, E. J.
- Small, L., and Browning, G. L., reduction studies in the morphine series. VII. Thebaine, II, 189.
- and Fry, E. M., addition of Grignard's reagent to ψ -codeine types. III. Methylidihydrothebaines, II, 188.
- and Palmer, F. S., amino-morphides and -codides, II, 489.
- Turnbull, S. G., and Fitch, H. M., addition of organomagnesium halides to ψ -codeine types. IV. Nuclear-substituted morphine derivatives, II, 92.
See also Lutz, R. E.
- Small, P. A., protein molecule, III, 785.
See also Philpot, J. St. L.
- Smare, D. L. See Chao, S. H.
- Smeets, C., perchlorates. V. Ammoniates of alkaline-earth perchlorates, I, 531.
- Smelser, G. K., chick thyroid responses as a basis for thyrotropic hormone assay, III, 48. Histology of orbital and other fat tissue deposits in experimental exophthalmos, III, 834.
- Smelser, J. See Mulinos, M. G.
- Smereker, H., study of the radiation intensity in the neighbourhood of radioactive preparations with thin-walled ionisation chambers, I, 591. Radium dosimetry, III, 784.
See also Wasserburger, K.
- Smetana, H., nephrosis due to carbon tetrachloride, III, 693.
- Smiles, J. M. See Boycott, M.
- Smiles, S. See Dvorkovitz, V., and Tozer, B. T.
- Smirnov, E. A. See Izmailski, V. A.
- Smirnov, K. M. See Levina, P. J.
- Smirnov, P. P., studies on anaphylaxis, using staphylococci obtained from the human ear, III, 192.
- Smirnov, V. S., catalytic oxidation of cyclohexylamine, II, 269. Catalytic oxidation of cycloheptylamine, II, 551.
- Smirnova, L. G. See Burdenko, M. N.
- Smirnova, V. A. See Rischkov, V. L.
- Smit, W. C., differentiation of lactic acid bacteria in starter cultures, III, 523.
- Smith, A. See Laird, F. W.
- Smith, A. E., effect of posterior hypophyseal extracts on ciliary motion, III, 974.
See also Boyd, E. M.
- Smith, A. H. See Adolph, W. H., Kriss, M., and Orten, J. M.
- Smith, A. K., Max, H. J., and Handler, P., dispersion of protein in aqueous formaldehyde solutions, I, 258.
- Smith, A. R., fungus infection of lungs, III, 513.
- and Siegel, J., pumice dust, III, 1093.
See also Greenburg, L.
- Smith, A. W., and Ewing, L. M., ultrasonic velocities in and adiabatic compressibilities of mixtures of acetic acid and water, I, 558.
- Smith, B. B., and Pickford, R. W., effects of veiling glare in binocular vision, III, 675.
- Smith, C. See Hartman, C. G.
- Smith, C. G., changes in olfactory mucosa and olfactory nerves following intranasal treatment with zinc sulphate, III, 414.
- Smith, C. H., sedimentation rate in nutritional anaemia of infants and children; its response to treatment with iron (ferrous sulphate), III, 1026.
- Smith, C. L., and Murrell, (Miss) E. B. M., disintegration of the separated isotopes of boron under proton and deuteron bombardment, I, 546.
See also Burcham, W. E.
- Smith, Charles Linton, and Waugh, J. G., seasonal variations in carbohydrate and nitrogen content of roots of bearing pecan trees, III, 107.
- Smith, C. M. See Billman, J. H.
- Smith, C. R., constitution and microstructure of copper-rich silicon-copper alloys, I, 464.
- Smith, C. S., and Cavallito, C., derivatives of phthalylcarbamide, II, 506.
- Smith, C. T. See Winstead, J. A.
- Smith, D., and D'Amour, F. E., black widow antivenin production in rabbits, III, 1089.
- Smith, D. M., Bryant, W. M. D., and Mitchell, J., jun., analytical procedures employing Karl Fischer reagent. I. Nature of the reagent, I, 577.
- Smith, D. O. See Millikan, R. A.
- Smith, E. See Patterson, C. A.
- Smith, E. A. See Conn, J. B.
- Smith, E. C. See Wesselhoef, C.
- Smith, E. C. B., elasticity of mammalian muscle undergoing rigor mortis, III, 825.
- Smith, E. E., Ayerza's disease, III, 823.
- and McLean, F. C., effect of hyperthyroidism on growth and chemical composition of bone, III, 40.
- Smith, E. F. See Dulaney, A. D.
- Smith, E. G., present status of ergonovine, III, 412.
- Smith, E. L. See Keilin, D.
- Smith, E. Lester, stability of vitamin-A and -D. II. Action of fatty peroxides on vitamin-A, III, 399.
- and Bailey, R., chemical structure and properties of tocopherol (vitamin-E). V. Comparison of methods proposed for the determination of vitamin-E activity, III, 1074.
- Robinson, F. A., Stern, B. E., and Young, F. E., stability of vitamin-A and -D. III. Effect of light on vitamin-A, III, 399.
See also Crews, S. K.
- Smith, E. R., and Rodden, C. J., effects of methionine, djenkolic acid, and benzylcysteine on the determination of cystine by the dropping mercury electrode, II, 463.
See also Taylor, J. K.
- Smith, E. S. See Steel, J. P.
- Smith, E. V. D., effect of injections of toxic extracts of typhoid bacillus on blood picture in rabbits, III, 432.
- Smith, F., possible influence of greasy, acid, and alkaline tubes on Widal test, III, 880.
- Smith, F. (Pirmingham), molecular structure of pectic acid, II, 242. Constitution of arabic acid. I. Isolation of 3-d-galactosido-l-arabinose, II, 298. 2:3-Dimethyl-l-arabinose and its derivatives, II, 299.
See also Haworth, W. N., and McCreath, D.
- Smith, Francene. See Ayres, G. H.
- Smith, F. A., and Eiseman, J. H., saturation of gases by laboratory wet test meters, I, 626.

- Smith, *F. H.*, penetration of tissue by grease under pressure of 7000 lb., III, 762.
- Smith, *F. J.*, ventricular fibrillation in coronary thrombosis, III, 820.
- Goodrich, *E.*, and Needles, *R. J.*, coronary artery thrombosis, III, 361.
- Smith, *F. M.*, and Paul, *W. D.*, adrenaline in bronchial asthma, III, 140.
- Smith, *G. B. L.*, and Wheat, *T. G.*, identification of aldehydes and ketones, II, 351. See also Reasenberg, *J. R.*
- Smith, *G. F.*, cupferron and neo-cupferron, their preparation, properties, and analytical applications, I, 387.
- and May, *R. L.*, use of bromate in volumetric analysis. VII. Potentiometric titration of hydroxyquinoline, I, 156. See also Butler, *M. J.*
- Smith, *G. M.* See Bergmann, *W.*, Burr, *H. S.*, and Gordon, *M.*
- Smith, *George M.* See Willard, *H. H.*
- Smith, *George McPhail.* See Bouknight, *J. W.*, and Haendler, *H. M.*
- Smith, *G. R.*, Dyer, *W. J.*, Wrenshall, *C. L.*, and De Long, *W. A.*, determination of phosphate by photo-electric colorimetry, I, 534.
- Smith, *G. S.*, determination of aluminium by precipitation with 8-hydroxyquinoline from mineral acid solution; separation from large amounts of magnesium, I, 578.
- Smith, *G. V.*, Smith, *O. W.*, Huffman, *M. N.*, Thayer, *S. A.*, McCorquodale, *D. W.*, and Doisy, *E. A.*, dihydrothecelin from human pregnancy urine, III, 1055.
- Smith, *G. W.*, adsorption of complex ammonia ions on silica gel, I, 366.
- Smith, *H. A.*, kinetics of catalysed esterification of normal aliphatic acids in methyl alcohol, I, 206. Kinetics of catalysed esterification of methyl- and phenyl-substituted aliphatic acids in methyl alcohol, I, 376.
- and Levenson, *H. S.*, kinetics of saponification of ethyl esters of normal aliphatic acids, I, 375.
- and McReynolds, *J. P.*, ring structure in aliphatic organic compounds, II, 467.
- Smith, *H. B.*, stomatal index and transpiration rate of leaves, III, 731.
- Smith, *H. E.* See Cotton, *W. E.*
- Smith, *H. G.*, and Mann, *K. C.*, relaxation effects connected with the transition between the superconducting and normal states, I, 14. See also Findlay, *J. C.*, Johns, *H. E.*, and Mann, *K. C.*
- Smith, *H. G. L.*, treatment of pneumonia with M. & B. 693, III, 503.
- Smith, *H. H.* See Hume, *E. M.*
- Smith, *H. L.*, cerebral manifestations of digitalis intoxication, III, 309.
- and Baldes, *E. J.*, respiration in a case of induced carotid sinus syncope, III, 24.
- Smith, *H. P.* See Brinkhous, *K. M.*, Owen, *C. A.*, Scanlon, *G. H.*, Seegers, *W. H.*, and Warner, *E. D.*
- Smith, *H. T. U.*, models to aid in visualising the optical properties of crystals, I, 103.
- Smith, *H. W.*, Rovenstine, *E. A.*, Goldring, *W.*, Chasis, *H.*, and Ranges, *H. A.*, effects of spinal anaesthesia on the circulation in normal, unoperated man; autonomy of renal arterioles, III, 660.
- Smith, *J.* See Outhouse, *J.*
- Smith, *J. A. B.*, fat metabolism in the animal body, III, 406. Dairy science. A. Physiology of dairy cattle. I. Reproduction and lactation, III, 492.
- Smith, *J. C.*, higher aliphatic compounds. VIII. Purification of oleic and elaidic acids; binary systems from oleic, elaidic, palmitic, and stearic acids; technique of low-temperature crystallisation, II, 356. See also Guy, *J. B.*
- Smith, *J. M., jun.* See Lutz, *R. E.*
- Smith, *J. O., jun.*, and Taylor, *H. S.*, reactions of methyl radicals with deuterium, ethane, neopentane, butane, and isobutane, I, 481.
- Smith, *J. T.*, and Ketteringham, *R. C.*, rupture of the Graafian follicles. II, III, 478.
- Smith, *J. W.*, and Rogers, *H. E.*, new organic qualitative reagents, I, 431.
- Smith, *K. D.*, and Masters, *W. E.*, Dupuytren's contraction among upholsterers, III, 514.
- Smith, *K. M.*, plant viruses with special reference to their insect relationships and comparison with the animal viruses, III, 433.
- and MacClement, *W. D.*, aggregation of purified tobacco mosaic virus, III, 208.
- Smith, *K. W.* See Farquharson, *L. D.* See Weil, *L.*
- Smith, *L. E.*, and Haller, *H. L.*, replacement of the diazo- by the acetoxy-group. II. Preparation of *m*-bromophenyl and *m*-iodophenyl acetates, II, 108.
- Smith, *L. I.*, Agre, *C. L.*, Leekley, *R. M.*, and Prichard, *W. W.*, reaction between diphenylketen and dienes, II, 116.
- and Carlson, *E. J.*, prehnitic (benzene-1:2:3:4-tetracarboxylic) acid, II, 160.
- and Hoehn, *H. H.*, reaction between diphenylketen and phenylacetylene, II, 543.
- Hoehn, *H. H.*, and Ungnade, *H. E.*, vitamin-E. XI. Introduction of the *p*-hydroxy-group into chromans and coumarans, II, 440.
- Irwin, *W. B.*, and Ungnade, *H. E.*, vitamin-E. XVII. Oxidation products of α -tocopherol and of related 6-hydroxychromans, II, 518.
- and Kiess, *M. A.*, polymethylbenzenes. XXIII. Preparation and physical properties of 3- and 5-ethyl- ψ -cumenes and of ethylmesitylene. XXIV. Jacobsen reaction. VI. Trimethyl-ethylbenzenes, II, 147, 306.
- Opie, *J. W.*, Wawzonek, *S.*, and Prichard, *W. W.*, chemistry of vitamin-E. VII. Preparation of quinones from methylphenols, II, 432.
- and Perry, *H. O.*, rearrangement of 4-*tert*-butyl-*m*-xylene with aluminium chloride, II, 411.
- and Prichard, *W. W.*, vitamin-E. X. Reaction between quinones and metallic enolates. IX., II, 440.
- and Ungnade, *H. E.*, vitamin-E. IV. Synthesis of tocopherols, II, 439.
- Ungnade, *H. E.*, Austin, *F. L.*, Prichard, *W. W.*, and Opie, *J. W.*, chemistry of vitamin-E. IX. Preparation of long-chain halides and ketones containing isopentane units, II, 401.
- Ungnade, *H. E.*, Hoehn, *H. E.*, and Wawzonek, *S.*, vitamin-E. V. Direct alkylation of phenols and quinols. VI. Addition of dienes to phenols and quinols, II, 439.
- Smith, *L. I.*, Ungnade, *H. E.*, Opie, *J. W.*, Prichard, *W. W.*, Carlin, *R. B.*, and Kaiser, *E. W.*, chemistry of vitamin-E; chloromethylation of polymethylquinols and their derivatives; cleavage of quinol ethers, II, 416.
- Ungnade, *H. E.*, and Prichard, *W. W.*, vitamin-E. XII. Preparation of chromans by action of Grignard reagents on dihydrocoumarins, II, 440. See also Nightingale, *D.*, Ungnade, *H. E.*, and Webb, *T. J.*
- Smith, *L. P.*, and Scott, *G. W., jun.*, stable source of focussed ions, I, 104. Conditions for producing intense ionic beams, I, 395. See also Hartman, *P. L.*
- Smith, *L. T.* See Vincent, *J. R.*
- Smith, *L. W.*, and Singh, *G.*, oestrus in sheep, III, 262.
- Smith, *M. A.*, and Hayes, *F. L.*, improved three-way stopcock, I, 494.
- Smith, *M. C.* See Bradfield, *D.*, and Schour, *I.*
- Smith, *M. D.*, Daly, *J.*, and Moloney, *P. J.*, detoxifying action of human bile on diphtheria toxin, III, 150.
- and Moloney, *P. J.*, heat-labile detoxifying system in bile: method for separating labile component, III, 390.
- Smith, *M. E.* See Scudder, *J.*
- Smith, *M. G.* See Lane, *C. W.*
- Smith, *M. I.*, significance of false projection in treatment of squint, III, 904. Influence of diet on chronic toxicity of selenium, III, 1090.
- Smith, *Margaret L.*, and Price, *S. A.*, I. Staphylococcus β -haemolysin. II. Staphylococcus γ -haemolysin, III, 205.
- Smith, *Mervyn L.* See Cowdrey, *G. W.*
- Smith, *N. M. jun.*, energies released in the reactions $^7\text{Li}(p, \alpha)^4\text{He}$ and $^6\text{Li}(d, \alpha)^4\text{He}$, and the masses of the light atoms, I, 592. See also Allison, *S. K.*
- Smith, *O. W.* See Smith, *G. V.*
- Smith, *Paul E.* See Goddard, *D. R.*
- Smith, *Philip E.* See Engle, *E. T.*, Tyndale, *H. H.*, and Watson, *B. P.*
- Smith, *P. F.*, influence of 3-indolylacetic acid on pollen germination, III, 1110.
- Smith, *P. G.* See Fieser, *L. F.*, Riegel, *B.*, and Suter, *C. M.*
- Smith, *P. K.*, and Gardner, *W. U.*, lack of carcinogenic action of cardiac glucosides and saponins, III, 713.
- Winkler, *A. W.*, and Schwartz, *B. M.*, distribution of magnesium after parenteral administration of magnesium sulphate, III, 856. See also Burr, *H. S.*, Hoff, *H. E.*, and Winkler, *A. W.*
- Smith, *P. W.*, Klein, *A. D.*, and Steck, *I. E.*, influence of vitamin-D on serum-phosphatase activity in arthritis, III, 1074.
- Smith, *R.* See Hodgson, *H. H.*
- Smith, *R. A.*, formation of negative ions at metal surfaces, I, 2.
- Smith, *R. B.* See Dermer, *O. C.*
- Smith, *R. E.*, descent of the testicle; spontaneous descent at puberty, III, 591.
- Smith, *R. E.* (Oxford), decomposition of acetaldehyde and deuteracetaldehyde, I, 615.
- Smith, *R. I.*, acetylcholine in nervous tissues and blood of crayfish, III, 833.
- Smith, *R. L.* See Mackenzie, *J. E.*
- Smith, *R. M.* See Marble, *A.*, and Sebesta, *V.*

- Smith, R. N., Leighton, P. A., and Leighton, W. G., quantum yield of mono-chloroacetic acid hydrolysis, I, 573.
See also Lark-Horovitz, K.
- Smith, Rodney P., b.-p. elevation. I. Apparatus for the study of aqueous solutions with non-volatile solutes. II. Sodium chloride 0.05—1.0m. and 60—100°, I, 221, 263.
and Hirtle, D. S., b.-p. elevation. III. Sodium chloride 1.0—4.0m. and 60—100°, I, 370.
- Smith, R. T. See Pryor, H. B.
- Smith, S. B., and Ely, E. C., ternary systems. V. Phthalic acid, magnesium phthalate, and water. VI. Magnesium phthalate, lithium phthalate, and water, I, 81.
- Smith, S. G. See Margolis, G.
- Smith, S. L., human requirements of vitamin-C, III, 288.
- Smith, S. W. J., and Young, J., formation of Widmanstätten figures in meteorites, I, 162. Widmanstätten structure of octahedral meteoric iron, I, 284.
- Smith, W., action of bile salts on viruses, III, 729.
See also Andrewes, C. H.
- Smith, W. C., volcanic rocks from Turkana, Kenya Colony: their field occurrence, I, 435.
- Smith, W. H. See Clark, G. L.
- Smith, W. J. See Ruzicka, L.
- Smith, W. K., and Brink, R. A., relation of bitterness to toxic principle in sweet clover, III, 212.
- Smith, W. McF. See Steacie, E. W. R.
- Smith, W. W., excretion of phosphate in dogfish, III, 1060.
- Smithwick, R. H., surgery of sympathetic nervous system, III, 901.
- Smits, A., retrograde transitions, I, 131.
- Smitt, L. G. See Boeseken, J.
- Smittenberg, J. See Hoog, H., and Wibaut, J. P.
- Smolik, L., spheroidal inclusions containing iron in Czecho-Slovakian soils, I, 588.
- Smoljar, V. O. See Borshkovski, S. E.
- Smorgonski, L. M. See Goldfarb, J. L.
- Smorodincev, I. A., and Bebeschin, K. V., lipid content of *Taeniarrhynchus saginatus*, III, 597.
and Fedial, T. P., effect of temperature on degree of hemolysis, III, 229.
and Filippova, L. A., dynamics of non-nitrogenous extractives in autolysing muscle tissue, III, 464.
and Krulova, N. N., electrical conductivity and f.p. of the extract in autolysing muscle, III, 464.
and Nikolaeva, N. V., dynamics of extractive substances in muscle tissue at 4° and 36°, III, 464.
and Tziganova, P. A., dynamics of sulphur compounds of muscle extract in tissue autolysis, III, 464.
- Smulikowski, K., skolite, a new mineral of the glauconite group, I, 500.
- Smyth, C. J., urinary diastase in acute pancreatic necrosis, III, 387.
- Smyth, C. P., effect of intermolecular action on dielectric polarisation, I, 126.
See also Baker, W. O.
- Smyth, D. H., central and reflex control of respiration in frog, III, 564.
- Smyth, E. See Barker, S. B.
- Smyth E. M. See Meyer, K.
- Smyth, E. S., seasonal cycles of ash, carbohydrate, and nitrogenous constituents in terminal shoots of apple trees: effects of fine vegetatively-propagated rootstocks. II. Carbohydrate fractions and lignin, III, 211.
- Smyth, F. S., allergic diseases, III, 418.
and Olney, M. B., diabetes and pregnancy; observations on the offspring, III, 50.
See also Ratner, B.
- Smyth, G. E., systemisation and central connexions of spinal tract and nucleus of the trigeminal nerve, III, 666.
and Henderson, W. R., cerebrospinal fluid pressure on simultaneous ventricular and lumbar punctures, III, 31.
and Stern, K., tumours of the thalamus (clinico-pathological study), III, 372.
- Smyth, G. S. See Gillman, J.
- Smyth, S. G. See Margolis, L. H.
- Smythe, C. V., effect of tissue extracts, ammonium salts, and amides on rate of fermentation by baker's yeast, III, 724.
- Smythe, W. R., cosmic rays and radioactive potassium, I, 171.
- Snapper, I., and Bendien, W. M., physico-chemical condition of bilirubin in serum and urine, III, 595.
Liu, S. H., Chung, H. L., Yu, T. F., and Sun, H. M., hæmaturia, renal colic, and acetylsulphapyridine stone formation associated with sulphapyridine therapy, III, 1084.
- Sneed, M. C. See Maynard, J. L.
- Snell, A. M., clinical and experimental conditions associated with a deficiency of prothrombin, III, 9.
Treatment of liver disease, III, 273.
Vitamin-K, III, 853.
See also Butt, H. R., and Clark, R. L., *jun.*
- Snell, E. E., and Strong, F. M., microbiological assay of riboflavin, III, 766.
- Strong, F. M., and Peterson, W. H., pantothenic and nicotinic acids as growth factors for lactic acid bacteria, III, 100.
- Snell, G. D., induction by irradiation with neutrons of hereditary changes in mice, III, 420.
- Snell, J. M., and Weissberger, A., reaction of thiol compounds with quinones, II, 167.
- Snelling, C. E., the biophotometer as a test for vitamin-A deficiency, III, 74.
and Jackson, S. H., blood studies of vitamin-C during pregnancy, birth, and early infancy, III, 704.
- Snellman, O. See Bjornstahl, Y.
- Snethlage, H. C. S., system water-sulphur trioxide, I, 27. Influence of solvent and temperature on the velocity of decomposition of chromic acid, I, 150.
- Snieszko, S. F., and Paluch, influence of digestive enzymes on experimental crown-gall, III, 732.
- Sniffen, R. C., and Irwin, D. A., experimental insulin and metrazol shock. I. Possible changes in fluid content of brain tissue, III, 249.
- Snijder, H. G. S., new representation of the periodic system, I, 594.
- Snijders, E. P. See Schuffner, W.
- Snoddy, L. B., and Beams, J. W., progressive breakdown in a conducting liquid, I, 421.
- Snodgrass, J. M. See Rock,
- Snoek, J. L., magnetic after-effect and chemical constitution, I, 186, 460. Magnetic studies in the ternary system Fe-Ni-Al, I, 314. Magnetic after-effects at higher inductions, I, 514.
- Snog-Kjær, A. See Orla-Jensen, S.
- Snook, L. C., and Godden, W., sugar and ketone content of blood of ewes and of their new-born lambs, III, 12.
See also Fraser, A. H. H.
- Snow, C. E., adjustable cranial orientator, III, 1023.
- Snow, G. A., and Zilva, S. S., non-specificity of ascorbic acid oxidase, III, 97.
- Snowdon, F. F., and Style, D. W. G., oxidation of gaseous formaldehyde, I, 268.
- Snyder, C. D., vascular events and volume changes in the turtle's liver surviving in an oncometer, III, 389.
- Johnson, R. E., and Peek, C. McI., minute-volume uptake and output of substances perfused through liver surviving in an oncometer, III, 485.
- Snyder, E. R. See Maybaum, J. L.
- Snyder, F. F., and Rosenfeld, Morris, foetal respiration in relation to atelectasis and intrauterine pneumonia, III, 461.
and Speert, H., placental transmission of neosarsphenamine in relation to the stage of pregnancy, III, 480.
- Snyder, H. See Schiff, L. I.
- Snyder, H. R., and Speck, J. C., cleavage of phenylbenzyltrimethylammonium chloride by sulphur-containing salts, II, 207. Cleavage of quaternary ammonium salts by sodium sulphide. II, 541.
- Snyder, R. G., Traeger, C., and Kelly, L., gold therapy in arthritis, III, 779.
- So, K. See Yamafuji, K.
- Soare, M. See Ionesco, N. G.
- Soares, M. See Jacobsohn, K. P.
- Sobek, A. See Freudenberg, K.
- Sobel, A. E., and Sobel, B. A., micro-determination of calcium in serum, III, 954.
- Sobel, B. A. See Sobel, A. E.
- Sobel, I. P. See Leopold, J. S.
- Sobin, S. See Nicholson, H. C.
- Sobota, A. See Krause, A.
- Sobotka, H., and Bloch, E., urine extractives in cancer, III, 490.
See also Mears, W. H., and Soffer, L. J.
- Sobue, H., fibre period of sodium cellulose I, I, 513.
Kiessig, H., and Hess, K., temperature-dependence of the system cellulose-sodium hydroxide-water, I, 512.
- Soda, T., and Egami, F., new sulphuric ester in the mucus of *Charonia lampas*, III, 68.
- Sodeman, W. A., and Burch, G. E., direct method for determination of skin distensibility: application to study of vascular states, III, 124. Tissue pressure in scleroderma, III, 562.
See also Burch, G. E.
- Soderling, B., transient lung consolidation in asthmatic children with reference to eosinophilia, III, 565.
- Soderstrom, G. F. See Hardy, J. D.
- Soderwall, A. L. See Steggerda, F. R.
- Sodhi, T. S. See Pandya, K. C.
- Sodomann, H. See Klemm, W.
- Soding, H., [plant] growth-substances, III, 535. Growth-substance theory in applied botany, III, 637.

- Sollner, K., ultrasonic waves in colloid chemistry, I, 23.
- Sørensen, M., and Sørensen, S. P. L., proteins in whey, III, 916.
- Sørensen, S. P. L. See Sørensen, M.
- Soffer, L. J., Dantes, D. A., Grossman, E. B., Sobotka, H., and Jacobs, M. D., ultrafilterable magnesium in hyperthyroidism, III, 1049.
- Dantes, D. I., and Sobotka, H., intravenous sodium *d*-lactate as test of liver function, III, 388.
- Sogabe, T. See Satoh, S.
- Sohier, R., Jaulmes, C., and Buvat, J. F., factors modifying the permeability of vasculomeningeal membrane in man, III, 132.
- and Nabonne, A., simple procedure for obtaining parotid saliva, III, 985.
- Sohn, A. W. See Staudinger, H.
- Sohval, A. R., hepatic complications in polycythemia vera, III, 350.
- Soji, T., influence of physicochemical factors in perfusing fluids on contractility of blood vessels, III, 20. Influence of phosphate on contractility of blood-vessels, III, 20.
- Sokolik, A. See Bresquer, R., and Stern, W.
- Sokolinski, D. A., mechanism of shock therapy of allergic diseases, III, 417.
- Sokolov, A., nature of the heavy electron, I, 176.
- Sokolov, I., effect of ultra-sounds on supercooled water, I, 309.
- Sokolov, R. See Freund, H. A.
- Sokolov, R. A., and Meyers, M. P., acetyl- β -methylcholine iontophoresis in treatment of thrombophlebitis, III, 860.
- Sokoray, L. See Jeney, A. von.
- Solacolu, T., Constantinesco, D., and Ilesco, C., action of phenylrotonic acid on the plant cell, III, 638.
- Constantinesco, M., and Constantinesco, D., effect of sterilised solutions of tryptophan on seedlings from ripe, non-germinated seeds, III, 108. Effect of colchicine on plant tumours produced by *B. tumefaciens*, III, 883.
- and Hermann, G., hydrolytic enzyme in the bark of *Periploca graeca*, L., III, 951.
- Solandt, D. Y., Nassim, R., and Best, C. H., heparin in cardiac mural thrombosis, III, 1027.
- Solarino, G., testis and ovary during experimental beriberi in birds, III, 74.
- Solberg, A. N., preparation of plaster of Paris embedding boxes, III, 546.
- Soley, M. H., and Shock, N. W., aetiology of effort syndrome, III, 240.
- Soley, M. O., Lagen, J. B., and Lockhart, effect of sodium chloride deficiency on gastric acidity, III, 62.
- Soliman, G. See Robertson, A.
- Soll, S. N. See Butt, E. M.
- Sollmann, T., Cole, H. N., and Henderson, K., combination courses of bismuth administration, III, 414.
- and Seifter, J., pharmacology of bismuth trimethyl, III, 1089.
- Sollner, K., simplified method of preparing microscopic glass spheres, I, 223.
- Solntzev, A. I. See Jaitschnikov, I. S.
- Solodkowska, W., application of the adiabatic micro-calorimeter to measurement of energy of germination of seeds, III, 636. Energetics of germinating seeds. II., III, 636.
- Soloff, L. See Gonley, B. A.
- Solomides, J., action of glycerol on Koch's bacillus *in vivo*, III, 1013. Toxic action of acetone extract of Koch's bacillus on non-tubercular rabbits, III, 1013.
- See also Deinse, F. van.
- Solomon, A. K. See Friedmann, E.
- Solomon, statistical theory of [atomic] nuclei, I, 56. Mass of the neutrino, I, 176. Rupture of radioactive nuclei by neutrons, I, 235. Conception of surface tension in nuclear physics, I, 297. Theory of the magnetic moment of the proton, I, 447.
- Solomon, M. See Vintilescu, I.
- Solomon, P., sympathetic nervous system in migraine; negative effect of ergotamine tartrate on electrical resistance of skin during relief of migraine headache, III, 132.
- See also Jasper, H. H.
- Solomon, S. See Curphey, T. J.
- Soloveitschik, S. I., oxidation of methane and heavy hydrocarbons by ozone at low temperatures, II, 237.
- Soloveitschik, V. J. See Joffe, J. S.
- Soloviev, L. See Kirian, V.
- Soloviu, E. See Angelescu, E.
- Soloway, H. See Davidson, D.
- Soltan, A. See Cichocki, J.
- Somekawa, E., production of seborrhoea in rats by feeding with whale oil. II., III, 701.
- Someno, F. See Kato, Seichi.
- Someren, E. van, spectrographic analysis, I, 624.
- Somers, R. B. U., M. & B. 693 in cerebrospinal fever, III, 611.
- Somerville, M. & B. 693 in gonorrhoea, III, 857.
- Somerville, J. C. See Percival, E. G. V.
- Sominski, D. S. See Shuchovitzki, A. A.
- Somiya, T., and Yasuda, Y., photometric titration of cobalt, iron, and copper in nickel sulphate solution; photometric titration of cobalt, I, 100.
- Sommer, A. L., and Booth, T. E., meta- and pyro-phosphate within the algal cell, III, 211.
- Sommer, E. See Šandera, K.
- Sommer, J., action currents of striated muscle during degeneration, III, 126. Electrocardiographic studies on *Astacus fluviatilis*, III, 455. Refractory period of human spinal cord, III, 829.
- Sommermeier, K., excitation of phosphors by collisions of the second kind, I, 125.
- and Dehlinger, U., gene molecules, III, 741.
- Sommers, H. S., jun. See Oldenberg, O.
- Somogyi, M. See Rusk, H. A.
- Sonnichsen, H. M. See Kohler, E. P.
- Sontag, L. W., and Huff, E., timer for use with a Westinghouse moving-coil oscillograph, III, 344.
- and Potgieter, M., variability of nitrogen excretion in twenty-four-hour periods as compared with that in longer periods, III, 411.
- Sookne, A. M., and Harris, M., electrophoretic studies of silk, I, 564.
- See also Abramson, H. A., and Beck, J., jun.
- Soonawala, M. F., internal pressure in a liquid, I, 363.
- Soper, F. G. See Wilkins, C. J.
- Soper, H. R. See Kon, G. A. R.
- Soremba, K. See Kohlaas, R.
- Soreni, E. T., and Tschepinoga, O. P., HCN-resistant part of muscle respiration, III, 78.
- Sorgdrager, C. J. See Bult, A. R.
- Sorge, J. See Mohler, H., and Schwarzenbach, G.
- Soriano, S., presence of *Azotobacter agilis* in America, III, 873. Classification of lactic-fermenting micro-organisms, III, 874.
- Sorimati, T., phosphoserine and its enzymic hydrolysis, III, 721.
- Sorm, F., 1:4-tetra-azidobenzoquinone, II, 270.
- Sorokin, P. Z. See Karshev, V. I.
- Sorokowska, A. See Plazek, E.
- Soroos, H. See White, J. D.
- Sorsby, A., abiotrophies of the retina and choroid, III, 752.
- Soru, E., and Combesco, C., chemical properties of the antigens of the typhoid bacillus, III, 431, 432.
- See also Ciuca, M., and Combesco, D.
- Sös, J., central and peripheral actions of thyroxine, III, 579. Insulin requirements in pancreatic diabetes, III, 975.
- Sosa-Bourdouil, C., relationship between protein-nitrogen content of pollen and classification of the Ranunculaceae, III, 537.
- Sosedko, A. F., caesium and lithium in the Ilmen range in the Urals, I, 163.
- Soskin, S., Levine, R., and Heller, R. E., rôle of thyroid in carbohydrate disturbance which follows hypophysectomy, III, 679.
- Levine, R., and Lehmann, W., utilisation of carbohydrate by the phloridzinised dog, III, 407.
- See also Freed, S. C., Katzenstein, F. C., Lackner, J. E., Levine, R., and Scheman, L.
- Soskina, E. A. See Nemtsov, M. S.
- Sosman, R. B., evidence of intrusion temperature of peridotites, I, 226.
- Sosnovski, B. A., rapid determination of silica and iron in agglomerate, I, 97.
- Sossai, A. See Luisada, A.
- Sossinski, S., effect of an electric field on viscosity of liquids, I, 558.
- Sotirova, Z. See Blumenthal, M.
- Sotnikova, V. See Loschkarev, M.
- Sottysiak, J. See Schmidt, F. C.
- Soubarew-Chatelain, (Mme.) Z., application of the conductometric method to the simultaneous determination of molybdic acid and ammonia in ammonium molybdates, I, 219. Constitution of molybdic acid in dilute aqueous solution, I, 262. Hydrated sodium dimolybdate, I, 333. Ammonio-mannito-dimolybdic complexes; determination of the constitution of the complex ion by conductometric titration, I, 484.
- Soubigou, X. See Le Chuiton, F.
- Souček, B., evidence of a complex between nitrobenzene and carbon tetrachloride, I, 26.
- Souchof, K. S. See Rischkov, V. L.
- Souders, H. J. See Reynolds, L.
- Soula, C. See Baisset, A.
- Soule, M. H. See Kempf, J. E.
- Soulié, P., sensitivity of different species to high oxygen concentrations, III, 662. Increasing resistance of rats to toxic effects of oxygen, III, 662.
- See also Laubry, C.
- Southgate, (Miss) H. A. See Whitmore, F. C.

- Southworth, H., and Cooke, C., hæmaturia, abdominal pain, and nitrogen retention associated with sulphapyridine, III, 858.
- See also Thomas, H. M.
- Southworth, L. See Hershberg, E. B.
- Souto, A. B., and Lima, C., action of vitamin-C on toxin of *B. perfringens*, III, 103. Effect of vitamin-C on toxin of *Vibrio septique*, III, 104. Effect of vitamin-C on toxin of *B. œdematiens*, III, 290. Effect of vitamin-C on toxin of *B. histolyticus*, III, 290.
- Sowden, J. C. See Wolfrom, M. L.
- Sowka, H., eosinophilia following a short fast, III, 114.
- Spacu, G., and Drăgulescu, C., potentiometric titration of the stannite ion (SnO_2'') by alkali hypoiodite, I, 388.
- and Macarovici, C. G., action of pyridine and ammonia on complex amines of benzidine, I, 383. New complex amines belonging to the group of iron and cobalt dinitrosulphates, I, 623. Amines with thiolbenzthiazole, II, 488.
- and Nicolaescu, V., constitution of heteropolyacids. I. Complex phosphododecamolybdates, I, 212.
- and Pop, A., new class of amines; complex thioannates; complex thiomolybdates and thiotungstates; complex thioannates, I, 332, 532, 622.
- and Vancea, M., polynuclear complex chromioxalates, I, 575. Indirect volumetric determination of arsenates, I, 625.
- Vancea, M., and Doval, J., new class of amines; complex selenoantimonates; constitution of seleno-salts, I, 333.
- Spacu, P., silver-mercury complex, I, 17. Gravimetric determination of copper, I, 218.
- and Niculescu, M., quantitative separation of iron from copper and manganese and the determination of these elements, I, 279.
- Spacu, P. G., molecular volume of water in complex compounds, I, 357.
- Spath, E., Bose, P. K., Dobrovolny, E., and Moukerjee, A., isolation of xanthyletin from *Luvunga scandens*, Ham., II, 442.
- Bose, P. K., Matzke, J., and Guha, N. C., coumarins of *Seseli indicum* and the constitution of seselin, II, 275.
- and Bruck, J., natural ethers of phenols with prenologous alcohols. VIII. Constitution and synthesis of foeniculin, II, 59. *Cactus* alkaloids. XX. O-Methyl-d-anhalonidine, II, 187.
- Dey, B. B., and Tyray, E., natural coumarins. XLIV. Structural formula of toddalolactone, II, 124.
- and Dobrovolny, E., natural coumarins. XLIII. Synthesis of isoimperatorin and of oxypeucedanin, II, 124.
- and Hillel, R., natural coumarins. XLVI. Synthesis of seselin, II, 335. Psoralen and electro-reduction of naphthalimide, II, 485.
- and Kuffner, F., theory of allyl isomerisation, II, 485.
- Kuffner, F., and Kittel, F., electro-reduction of naphthalimide, II, 342.
- and Vierhapper, F., natural coumarins. XL. Coumarins from the drug, semen angelicæ, II, 123.
- Spaeth, E. B., dinitrophenol cataracts with signs of tetany, III, 1004.
- Spain, W. C., Strauss, M. B., and Fuchs, A. M., slowly absorbed gelatin-epinephrine mixture, III, 682.
- Spálenka, M., polarographic studies with the dropping mercury electrode. IX. Titrations with precipitations and redox reactions, I, 386.
- Spanbock, J. See Kling, D. H.
- Spang, K., and Korth, C., electrocardiogram in thyrotoxicosis, III, 744. Heart and circulation in hyperthyroid conditions, III, 965.
- Spangenberg, K., crystal growth of sodium chloride, I, 129.
- Spanhoff, R. W., decrease in blood-sugar in rabbits under influence of insulin during different months of the year, III, 910.
- Spanner, R., valve of the veno-venous anastomosis (portocaval) of birds; epitheloid cells, III, 1021.
- Sparchez, T., and Viciu, E., value of Takata-Ara reaction in the diagnosis of hepatic diseases, III, 692.
- See also Zunz, E.
- Sparkman, R., urobilinogen, III, 886.
- Sparks, W. J., Rosen, R., and Frolich, P. K., dimerisation of petroleum hydrocarbons, II, 466.
- Spaulding, E. H., anaerobic cultivation of bacteria as a routine laboratory procedure, III, 337. Technique and diagnostic value of the [bacterial] agglutination test, III, 338.
- Spealman, C. R., effects of sodium, potassium, and calcium chloride and osmotic pressure on the frog-heart rate, III, 234.
- Spear, F. G., Gray, L. H., and Read, biological effects of fast neutrons, III, 319.
- Specht, H. E. M., Browne, A. W., and Sherk, K. W., formation of aminomonomersulphuric acid by the interaction of fuming sulphuric acid and hydrogen azide, I, 382.
- Speck, J. C. See Snyder, H. R.
- Specker, H. See Ley, H.
- Speda, G. See Eichler, O.
- Spedding, F. H., luminescence in solids. I, 122.
- Speer, R. J., and Henze, H. R., ket ethers derived from α -chloroethyl sec-butyl ether, II, 299.
- Speert, H., sulphanilamide; passage through human placenta, III, 303.
- See also Snyder, F. F.
- Spehl, H., occurrence of true curved crystal faces in crystallisation from solutions. I, 358.
- Speight, A., erythrocyte sedimentation test and prognosis in leprosy, III, 351.
- Spektor, A. G., magnetic powder method in foreign practice, I, 44.
- Spellberg, M. A., and Keeton, R. W., ascorbic acid metabolism, III, 851.
- Spence, A. W., and Scowen, E. F., hormone treatment of imperfect descent of the testis, III, 51.
- Spence, K. W., solution of multiple choice problems by chimpanzees, III, 669.
- Spencer, E., Urals excursion and notes on the XVIIIth International Geological Congress, Moscow, July-August 1937. I, 286.
- Spencer, E. L., and McNew, G. L., influence of mineral nutrition on reaction of sweet maize to *Phytomonas stewartii*, III, 535.
- Spencer, E. Y., and McCalla, A. G., fractional solubility of gluten in sodium salicylate solutions, III, 869.
- Spencer, R. R., frequency of cancer of the lung in the United States, III, 848.
- Spencer, V. E. See Lough, S. A.
- Spengler, O., Pflannenstiell, A., and Nordstrom, L., oxidations in the sugar group and their significance in sugar manufacture, II, 202.
- Spengler, W., determination of phosphoric acid by titration of the ammonium phosphomolybdate precipitate, I, 96.
- Speranskaja, E. I., double decomposition in the absence of a solvent. XXXVI. Irreversible mutual system of sodium and magnesium chlorides and sulphates, I, 264.
- Sperber, E., and Runnstrom, competition of substrates for enzymes of the living cells of bakers' yeast, III, 626.
- See also Bárány, E.
- Sperling, E. O. See Branham, J. R.
- Speroni, G. See Quilico, A.
- Sperry, W. M., and Stoyanoff, V. A., enzymic synthesis and hydrolysis of cholesterol esters in blood serum, III, 13.
- Spickard, V. W. See Durand, I.
- Spiegel, E. See Engloff, H.
- Spiegel, E. A., and Oppenheimer, M. J., conditioned reactions to position and angular acceleration, III, 668.
- See also Collins, D. A.
- Spiegel-Adolf, M., cerebrospinal fluids in neurosyphilis; physicochemical study, III, 833.
- and Freed, H., effects of insulin treatment on cerebrospinal fluids of schizophrenics, III, 970.
- and Henny, G. C., melanins. III. X-Ray diffraction patterns of photosynthetic and genuine melanins, III, 1007.
- Spiegler, L., and Tinker, J. M., reactions of Δ^7 -hexene. I. Reactions with sulphuric acid, halogens, and halogen acids. II. Condensations with aromatic hydrocarbons and phenols, II, 238, 311.
- Spielman, A., and Jones, I. R., reproductive efficiency of dairy cattle, III, 1052.
- Spielman, F., and Morton, F. L., hormonal bio-assay in a case of ovarian dysgerminoma, III, 381.
- Spielman, M. A., and Meyer, R. K., preparation of progesterone from cholesterol, II, 270.
- and Mortenson, C. W., condensation of α -methoxystyrene with hydrocarbons, II, 216.
- Spier, J. L., optical determination of coefficient of diffusion in a mixture of mercury vapour and hydrogen, I, 363.
- Spiers, M. See Ascham, L.
- Spies, J. R., isoguanine from the croton bean, III, 536.
- Bernton, H. S., and Stevens, Henry, chemistry of allergens. I. Isolation of active fraction from cotton seed, III, 618.
- and Harris, T. H., jun., salts of 6:8-diamino-2-hydroxypurine, II, 185.
- Spies, T. D., Aring, C. D., Gelperin, J., and Bean, W. B., mental symptoms of pellagra, III, 288.
- Bean, W. B., and Ashe, W. F., treatment of pellagra, III, 767. Use of vitamin-B₆ in human nutrition, III, 767.
- Bean, W. B., and Stone, R. E., treatment of subclinical and classic pellagra, III, 166.
- See also Seymour, W. B., and Vilter, R. W.
- Spiliopoulos, G. See Choremis, K.

- Spillane, J. D., olfactory alloæsthesia, III, 372.
- Spiller, R. C. See Porter, M. W.
- Spillmann, J., first appearance of hæmoglobin in primitive blood cells of *DiscoGLOSSUS pictus*, III, 959.
- Spillmann, L., Crehange, J. L., Franck, G., and David, J., sensitivity of cutaneous reaction for histamine and vagotonin, III, 1005.
- Spindrich, J. See Langer, A.
- Spingler, H. See Fischbeck, K.
- Spink, W. W., attempts to demonstrate a surface antigen of staphylococci and specific phagocytosis, III, 1102.
See also Watson, C. J.
- Spinks, A. See Heilbron, I. M.
- Spinks, J. W. T. See Kalina, M. H.
- Spiragina, A. I. See Schlesinger, N. A.
- Spiridonova, N. S. See Arzchovskaja, E. V.
- Spiroff, K., geological observations of the Block P mine, Hughesville, Montana, I, 109. Magnetite crystals from meteoric solutions, I, 284.
- Spisarová, J. See Horejší, J.
- Spitzer, L., *p*-nitrophenylacetone nitrile as an indicator, I, 486. Determination of formaldehydesulphoxylic acid by means of copper sulphate, II, 397.
- Spitzer, L., jun., general solution for the equations of natural line breadth, I, 228. Stark effect broadening of hydrogen lines. I. Single encounters. II. Observable profiles, I, 289, 501.
- Spitzin, V. I., decomposition products formed during fusion of sodium paratungstate, I, 92.
- Katschalov, A. I., and Sidorov, N. I., reduction of lithium tungstates by hydrogen, I, 273.
- Kuleschov, I. M., and Tichomirov, I. I., lithium isopolytungstates, I, 273.
- Sidorov, N. I., and Tichomirov, I. I., crystalline lithium metatungstate, I, 273.
- Spivak, G. V., and Reichrudel, E. M., study of plasma by the method of its disturbance by the magnetic field, I, 228.
- Spoeher, H. A., preparation of inulin for use in adsorption columns, III, 217.
- Spoerri, P. E. See Carroll, R.
- Spohn, A. H., the pineal gland, III, 683.
- Sponer, H., Nordheim, G., Sklar, A. L., and Teller, E., analysis of the near ultraviolet electronic transition of benzene, I, 299.
and Teller, E., application of the Franck-Condon principle to absorption spectrum of mercuric chloride, I, 352.
- Sponholz, G. See Rinck, J. B.
- Spoor, H. J. See Hartman, F. A.
- Sporn, H., luminous zones at cathodes in glow discharges, I, 289.
- Spotnitz, H. See Elsberg, C. A.
- Spragg, W. See Kermack, W. O.
- Sprague, J. M. See Johnson, T. B.
- Sprague, V. G., and Graber, L. F., utilisation of water by lucerne (*Medicago sativa*) and bluegrass (*Poa pratensis*) in relation to managerial treatments, III, 798.
- Spreen, A. H. See Wilson, A. T.
- Spreng, A., endemic sprue and pregnancy, III, 404.
- Sprenger, L. See Kohlschütter, H. W.
- Spreter von Kreudenstein, T., [vitamin-D and] metabolic processes in dentine, III, 922.
- Sprince, H. See Stier, T. J. B.
- Spring, F. S., structure of lumisterol, II, 61.
and Swain, G., reactions of α - and β -cholesteryl benzoate oxides, II, 477.
See also Duerden, A., Ewen, E. S., Kennedy, T., Picard, C. W., and Seymour, D. E.
- Spring, W. C. See Finland, M.
- Springall, H. D. See Pauling, L.
- Springorum, P. W., independence of hormonal and central nervous inhibition of diuresis of total renal blood flow or arterial pressure, III, 486. Arterio-venous anastomoses in kidney, III, 844.
See also Schneider, D.
- Sprinson, D. B. See Baumann, E. J.
- Spriskov, A. A., sulphonation. I. Mechanism of the process of monosulphonation, II, 253.
See also Fedorov, V. R.
- Sprockhoff, H., and Ansoerge, I., neurological complications following serum treatment of tetanus, III, 34.
- Sprockhoff, O., use of prontosil in meningococcal meningitis, III, 999.
- Sprowls, W. R. See Brown, W. G., and Kharasch, M. S.
- Spruiell, M. M. See Vincent, J. F.
- Sprung, J. See Arnold, R. T.
- Sprunk, C. J. See Gurdjian, E. S.
- Sprunt, D. H., and McDearman, S., sex hormones and infection. II. Effect of pseudopregnancy on spread of India ink in skin of rabbits, III, 978.
- Spruyt, J. P., vitamin-C content of Indian fruits. III, 290.
and Vogelsang, G. M. D., ascorbic acid oxidase. II, 321.
- Spütler, O., electrocardiograms taken from the oesophagus, III, 359.
- Surlin, H. M., arrangement of substituents in cellulose derivatives, I, 552.
- Spurlock, J. J., and Henze, H. R., synthesis of coloured derivatives of nirvanol, II, 344. Keto-ethers. V. β -Chloroisopropoxymethyl ketones derived from propylene chlorohydrin, II, 406.
- Spurny, J. See Navrátil, E.
- Spurr, J. E., diachstic dykes and ore deposits, I, 285.
- Spychalski, R., use of the antimony electrode for determining p_H , I, 533.
- Spycher, C. See Contat, C.
- Squire, C. F., exchange force transitions in paramagnetic compounds, I, 188.
- Sreenivasan, A., influence of anions on the accuracy of the titrimetric method of determining phosphoric acid in solution, I, 336. Availability of phosphorus in rice, III, 493.
and Sadasivan, V., mechanism of catalytic action of selenium in the Kjeldahl nitrogen determination, I, 384.
- Sreenivasaya, M. See Lahiry, N. L.
- Srinivasan, M. K., viscosity of non-ideal binary liquid systems, I, 606.
and Prasad, B., viscosity and density of aqueous solutions of sulphuric acid at 35°, I, 136.
- Srivastava, B. N., influence of radiation on ionisation equilibrium, I, 6. Effusion phenomena in relativistic quantum statistics, I, 15. Effusion and thermal transpiration in quantum statistics, I, 568.
- Srivastava, L. N. See Nayar, M. R.
- Srnetz, K., treatment of diabetes mellitus with depot-insulin, III, 582.
- Stableforth, A. W., and Scorgie, N. J., entozon and acriflavine for the treatment of chronic, contagious, bovine mastitis, III, 84.
- Stablein, F., and Schlechtweg, H., determination of crystallographic orientation of cubic single crystals, I, 184.
- Stabler, F. See Thomson, J. G.
- Stacey, M., synthesis of uronic acids, II, 533.
and Schlüchterer, (Miss) E., sulphonamide drugs and pneumococcus capsular polysaccharides, III, 1080.
and Youd, F. R., dextran produced from sucrose by *Betacoccus arabinosaceus hæmolyticus*, III, 102.
See also Anderson, C. G., Daker, W. D., and Peat, S.
- Stachel, A. See Fischer, Hans.
- Stack, A. M. See Krause, A. C.
- Stackelberg, M. von, scientific foundations of polarography, I, 433.
- Stadelman, L. See Dietzel, R., and May, F.
- Stadie, H., diastolic blood pressure in arterial hypertension, III, 658.
- Stadie, W. C. See Jones, M. S., and Joseph, N. R.
- Stadler, L. B., and Lyons, W. R., comparison of intravaginal and subcutaneous tests for oestrone and oestradiol monobenzoate, III, 383.
- Stadler, P. See Kollath, W.
- Stadlinger, H., medicinal springs of the Marienbad region, I, 584.
- Staglich, H., iodometric-oxidimetric evaluation of aqueous mercury chloride solutions, I, 387.
- Stähli, R., case of progressive muscle dystrophy, III, 27.
- Staehlin, S. See Zeller, E. A.
- Staemmler, M., primary hypertension in the pulmonary circulation, III, 236.
- Stahel, E., and Kipfer, P., secondary γ -radiation of high energy induced by β -rays from uranium-X and radium-E, I, 173.
- Stahel, W., Sjogren's syndrome and hypovitaminosis-A, III, 400.
- Stahl, R., and Weisbach, M. W., intravenous driptransfusion of glucose, III, 553.
- Stair, R. See Coblenz, W. W.
- Stalker, H. See Todd, H.
- Stallmann, F. W. See Kruger, P. G.
- Stamatin, L., ultrafiltration of vaccinia virus grown *in vitro*, III, 432.
See also Levaditi, C.
- Stamatin, N., adsorption of sheep-pox virus and action of its antiserum, III, 728.
See also Boquet, A.
- Stamatin, M., plastic deformation of rock-salt under constant compressive forces, I, 308.
- Stamberg, O. E., and Bailey, C. H., action of wheat amylases on soluble starch, III, 323. Wheat starch. I. Amylopectin and amylose content of various wheat starches. II. Action of amylases on raw wheat starches. III. Action on wheat amylopectin and amylose, III, 733.
- Stamer, E. See Brock, J.
- Stamm, H., and Goehring, M., kinetics of dithionite acid decomposition. I. Influence of neutral salts and acids on the reaction velocity. II. Comparison of the velocity of decomposition in H_2O and D_2O . III. Influence of solvent, I, 85, 150. Titration with alkaline permanganate solution. III. Oxidimetric determination of bismuth, I, 102. Mechanism of formation of polythionic acids, I, 382.

- Stamm, J., explosions and other dangers in using ether and their prevention, II, 46.
- Stammer, H. J. See Clay, J.
- Stamp, T. C., bacteriostatic action of sulph-anilamide *in vitro*, III, 1080.
- Stander, H. J. See Cadden, J. F.
- Standerwick, H. F. See King, B. G.
- Standing, M. B., and Wiegand, J. H., thermometer guard, I, 579.
- Stanescu, M. See Baltaceanu, G.
- Stanger, G. B. See Powell, Herbert M.
- Stanhope, R. W. See Fawcitt, C. E.
- Stankevitch, I. A., cortical development in man, III, 831.
- Stankiewicz, W. See Sym, E. A.
- Stankoff, E. See Franck, C., Grandpierre, R., and Santennoise, D.
- Stanley, A. R., soft-rot and colon groups of bacteria, III, 524.
- Stanley, D. A. See Fraser, R.
- Stanley, W. M., aucuba mosaic virus protein from diseased, excised tomato roots grown *in vitro*, III, 105. Tobacco ring spot virus, III, 947. Isolation of virus from plants recovered from tobacco ring spot disease, III, 947.
- and Lauffer, M. A., disintegration of tobacco mosaic virus in urea solutions, III, 729.
- See also Lavin, G. I., Loring, H. S., and Ross, A. F.
- Stanley-Brown, M. See Bancroft, F. W.
- Stannus, H. S., and Findlay, G. M., glandular fever treated with M. & B. 693, III, 1082.
- Stansby, M. E., and Fitzgerald, G. A., semi-automatic, multiple, electrometric titration apparatus, I, 433.
- Stansfield, R. G., suitability of a diamagnetic crystal for measurement of magnetic fields, I, 188.
- Stare, E. J. See Baumann, C. A.
- Stark, I. E. See Cohen, P. P.
- Stark, J., and Verleger, H., effect of positive-ray collisions on the polarisation of spectral lines in the magnetic field, I, 1. Effect of positive-ray collisions on the polarisation of the light emission in a magnetic field, I, 114. Intensity ratio of the two components of the D line in the moving and stationary emission, I, 501.
- Stark, J. B. See Christensen, B. E.
- Starke, K., structure of artificial magnetite, I, 242.
- Starkenstein, E., "stimulating" action of quinine [on smooth muscle] due to lowered inhibition, III, 929.
- Starkey, R. L., species of *Azotobacter* tolerant to high acidity, III, 792.
- Starkey, W. F., and Leatham, J. H., gonadotropic action of testosterone propionate on the immature mouse ovary, III, 54.
- Starobinetz, G. I., density of the surface layer, molecular dimensions, and the Gibbs adsorption equation, I, 254.
- Starokadonskaja, E. L., solubility of KCl and NaCl in Al_2Br_6 , and of $BiCl_3$ in $SbCl_5$, I, 607.
- Staronka, L., formation of an amorphous (vitreous) modification of water by condensation of vapour at low temperature, I, 310. Possibility of supercooling heavy water and its mixtures with ordinary water, I, 428.
- Staronka, W., and Czerski, L., kinetics of oxidation of methane. I. Intermediate products. II. Terminal products, I, 326, 422.
- Staroschklovskaja, R., shock following gastro-intestinal surgery, III, 364.
- Starr, C. See Jacobs, R. E.
- Starr, (Miss) M. A. See Brode, R. B., and Hughes, A. L.
- Startup, C. W. See Peterson, J. N.
- Stasney, J., and Feldman, W. H., leukaemic lymphoblastoma in a calf: a hematologic and histologic study, III, 5.
- and Higgins, G. M., cytologic study of marrow in flat bones of man, III, 890.
- Higgins, G. M., and Mann, F. C., effect on developing red blood cells in fetus, of administering human and hog gastric juice to adult rats during pregnancy, III, 810.
- See also Halpert, B., and Schenken, J. R.
- Staub, A. M., antagonism between synthetic bases and histamine, III, 1086.
- Staub, H., and Bucher, K., leucopenia following intravenous injection of glycogen, III, 4.
- and Kull, J., acetylcholine content of heart muscle after treatment with glucosides, III, 777.
- Mezey, K., and Golandas, G., leucopenia after intravenous administration of colloidal carbohydrates, III, 4.
- and Stephens, W. E., anomalous scattering of neutrons by helium, I, 171. Neutrons from the break up of 4He , I, 349.
- See also Rothschild, F.
- Stauder, K. H., treatment of epilepsy with sodium prominal, III, 713.
- Staudinger, H., macromolecular chemistry, I, 417.
- and Jurisch, I., macromolecular compounds. CCII. Oxidative degradation of celluloses in phosphoric acid, II, 10.
- and Reinecke, F., macromolecular compounds. CCIII. Viscosity rule in the cellulose series, I, 77.
- and Sohn, A. W., "faults" in cellulose molecules, II, 470.
- Stauff, J., equilibrium between molecular and colloidal substances in aqueous soap solutions. I. Hydrolysis of fatty acid salts, I, 24. Presence of two types of micelle in aqueous solutions of soaps, I, 319.
- Stauffer, R. E. See Russell, J.
- Staunig, K. See Lobering, J.
- Stavely, H. E., preparation of a pregnane compound from dehydroandrosterone, II, 119.
- See also Fernholz, E.
- Staveley, L. A. K., and Hinshelwood, C. N., application of the nitric oxide method to the investigation of reaction chains in the decomposition of hydrocarbons, I, 526.
- Staverman, A. J., theory of miscibility, I, 20.
- Stavrovsckaja, V. I. See Drozdov, N. S., and Izmailski, V. A.
- Steacie, E. W. R., and Folkins, H. O., kinetics of decomposition reactions of the lower paraffins. IV. Role of free radicals in decomposition of *n*-butane, I, 422.
- and Parlee, N. A. D., reaction of hydrogen atoms with propane and mechanism of the paraffin decompositions, II, 465.
- and Phillips, N. W. F., source of mercury resonance radiation of high intensity for photochemical purposes, I, 43.
- and Potvin, R., source of cadmium resonance radiation of high intensity; cadmium-photosensitized reaction of hydrogen and ethylene, I, 330. Cadmium-photosensitized reactions of ethane, I, 620.
- Steacie, E. W. R., and Puddington, I. E., kinetics of decomposition reactions of the lower paraffins, I, 149.
- and Smith, W. McF., kinetics of decomposition of chloropicrin at low pressures, I, 31.
- Stead, E. A., jun., and Kunkel, P., plethysmographic method for quantitative measurement of blood flow in the foot, III, 21. Mechanism of the arterial hypertension induced by paredrinol (*a-p*-hydroxyphenethylidimethylamine), III, 822.
- See also Kunkel, P.
- Stearns, G., mineral metabolism of normal infants, III, 998.
- See also Jeans, P. C.
- Stearns, J. C., nature of the hard component, I, 5.
- and Froman, D. K., frequency of cosmic-ray showers produced in different metals, I, 296.
- See also Froman, D. K.
- Stebbins, D. W. See Fox, G. W.
- Stec, K. See Dziwónski, K.
- Stecher, R. M. See Danielson, W. H., and Koletsky, S.
- Stecher, W. See Eickhoff, W.
- Steck, I. E. See Gellhorn, E., and Smith, P. W.
- Steckler, R. See Jusa, E.
- Steckner, M. L. See Cobet, R.
- Stedman, Edgar, and Stedman, Ellen, mechanism of biological synthesis of acetylcholine. II, 111, 707.
- See also Clark, A. J., and Schweitzer, A.
- Stedman, Ellen. See Clark, A. J., and Stedman, Edgar.
- Steeg, L., effect of sodium bromide on the preservation of guinea-pig alexin, III, 11.
- See also Nattan-Larrier, L.
- Steel, G. C., pentothal acid in midwifery, III, 1086.
- See also Lovibond, J. L.
- Steel, J. P., and Smith, R. S., epanutin in epilepsy, III, 1087.
- Steele, A. G., and Windle, W. F., correlation between respiratory movements and blood gases in cat fetuses, III, 241. Oxygen and carbon dioxide content of blood of normal and pregnant decerebrate cats, III, 241.
- See also Windle, W. F.
- Steele, J. M., effect of partial clamping of aorta in dogs on diastolic pressure in carotid and femoral arteries, III, 1032.
- See also Schroeder, H. A.
- Steen, C. See Calder, R. M.
- Steenbock, H. See Irwin, M. H., Lease, E. J., Quackenbush, F. W., Schneider, H., Weber, Janet, and Woolley, D. W.
- Steeves, W. H., and Hibbert, H., lignin and related compounds. XLII. Isolation of a bisulphite-soluble "extracted lignin," II, 516.
- See also Bigelow, H. E.
- Stefanelli, A., microscopic tissue of the peripheral autonomic nervous system, III, 132. Oxygen utilisation of amphibian ova and embryos, III, 606.
- Stefano, B., and Quirico, P., pharmacology of potassium sulphoguaicolate, III, 860.
- Stefanovski, V. F., and Zanko, A. M., kinetics and mechanism of oxidation-reduction reactions, I, 150. Kinetics and mechanism of redox reactions. III. Kinetics of oxidation of Fe^{II} by chlorate, I, 328.

- Steffenoni, F. See Corbellini, A.
 Stegeman, G. See Clarke, T. H.
 Stegemann, A. See Martini, P.
 Steger, G., shape of the spleen in domesticated mammals, III, 345.
 Steggerda, F. R., Gianturco, C., and Essex, H. E., action of pituitary extracts on the colon of the cat, III, 475.
 and Mitchell, H. H., calcium requirement of adult man: utilisation of calcium in milk and in calcium gluconate, III, 1067.
 and Soderwall, A. L., relationship of pars tuberalis to melanophore response in *Rana pipiens*, III, 379.
 See also Gray, S. W.
 Stehle, J. J. See Foss, N. E.
 Stehle, R. L., and Trister, S. M., chemistry of pressor and oxytocic hormones of pituitary, III, 678.
 Steiger, (Miss) M. See Jacob, (Miss) A.
 Steigerwaldt, F., effect of vitamin-B₁ on glycolysis of liver cells, III, 709.
 Steigler, A., differentiation of *B. pertussis* and *B. influenzae*, III, 204. New blood-agar plate, III, 209.
 See also Kemkes, B.
 Steigman, J., Shockley, W., and Nix, F. C., self-diffusion of copper, I, 505.
 See also Glasoe, G. N.
 Steigmann, F., Barnard, R. D., and Dyniewicz, J. M., phenolphthalein in jaundice, III, 411.
 Stein, E. See Rhoads, J. E.
 Stein, H. B., lipin in the normal human gall bladder with special reference to cholesterol, III, 150.
 See also Gillman, J.
 Stein, H. J. See Day, H. G.
 Stein, L., Tuerkischer, E., and Wertheimer, E., regulation of glyconeogenesis, III, 701.
 Stein, W. H. See Bergmann, M.
 Steinberg, A., preparation of thymus extract, III, 39. Preparation of pineal extract, III, 583.
 See also Rowntree, L. G.
 Steinberg, C. L., massive doses of vitamin-D in chronic arthritis: effect on calcium metabolism, III, 76.
 See also Birnberg, T. L.
 Steinberg, M. F. See Hennell, H.
 Steinberg, R. A., applicability of nutrient solution purification to study of trace-element requirements of *Rhizobium* and *Azotobacter*, III, 101. Correlations between biological essentiality and atomic structure of chemical elements, III, 399. Essentiality of gallium to growth and reproduction of *Aspergillus niger*, III, 425.
 See also Thom, C.
 Steinbrink, H. See Koch, Herbert.
 Steinbrocker, O., local injections of procaine and regional analgesia, III, 864.
 Steinbruck, R., normal arsenic content of hair, III, 68.
 Steinerohn, P. J., blood-sugar and cardiac involvement in rheumatic fever, III, 235.
 Steinebrei, H., vitamin-C saturation, III, 767.
 Steiner, A., action of choline on experimental aortic atherosclerosis, III, 237.
 See also Mansfield, J. S., and Turner, K. B.
 Steiner, H. See Pitkethly, R. C.
 Steiner, K., and Schoeneck, H., change of magnetic induction in superconductors carrying a current on transition to the superconducting state, I, 132.
 Steiner, L. A., viscosity of aniline between 20° and 100°, I, 15.
 Steiner, Maximilian, nutrition and fat production in *Endomyces versatilis*, III, 521.
 Steiner, Morris, Zuger, B., and Kramer, B., production of renal calculi in guinea-pigs on a diet deficient in vitamin-A, III, 400.
 See also Ranch, S.
 Steiner, M. M., primary carcinoma of liver in childhood, III, 1064.
 Steinhardt, J., solubility of crystalline pepsin. I. Anomalous dependence of solubility on the solid to solvent ratio, III, 871.
 Steinhaus, E. A. See Birkeland, J. M.
 Steininger, G. See Roberts, L. J.
 Steinitz, K., colorimetric determination of inulin in plasma and urine, III, 120.
 See also Edhem.
 Steinkamm, E., and Meckies, H., action of follicle hormone combined with testosterone propionate in ovariectomised rats, III, 685.
 Steinkamp, F. See Fehlow, W.
 Steinkopf, W., Barlag, T., and Petersdorff, H. J. von, thiophen series. XLVI. Derivatives of 2:5-thioxen [2:5-dimethylthiophen], II, 443.
 and Bokor, G., thiophen series. XLVII. Phenyl 2-thienyl diketone and its oximes, II, 443.
 and Garbe, L., attempted preparation of an optically active 4:4'-dithioxanthyl, II, 84.
 and Popp, W., thiophen series. XLVIII. Thiophen analogues of 2:4:6-triphenylpyridine, II, 455.
 and Thormann, F., thiophen series. XLV. 5-Hydroxy-2-methylthiophen (thiotenol), II, 443.
 Steinman, J. F. See King, B. G.
 Steinmann, B., blood reservoirs, III, 5. Determination of blood volume in man [by carbon monoxide], III, 352.
 Steinocher, V., and Nováček, R., β -uranotile, I, 497.
 Stejskal, K., therapeutic action of local anesthetics, III, 315.
 Stokol, J. A., mercapturic acid synthesis. XI. Detoxication of benzyl chloride, benzyl alcohol, benzaldehyde, and S-benzylhomocysteine in the rabbit and the rat, III, 609.
 and Dash, H. H., *p*-bromophenol as intermediate in synthesis of *p*-bromophenylmercapturic acid from bromobenzene in the rat, III, 925.
 Stella, G., reflex response of "apneustic" centre to stimulation of chemo-receptors of carotid sinus, III, 564. Cerebellum and respiration, III, 824. Connexions between the "pneumotaxic" and "apneustic" centres, III, 824. Apnoea from transverse section of pons in the dog, III, 898.
 Stempel, G. H. See Orning, A.
 Stene, S., separation of cations by extraction, I, 385.
 Stengel, A., jun., and Vars, H. M., continuous intravenous injections in unanaesthetised animals, III, 361.
 See also Rhoads, J. E.
 Stengel, F., p_H of saliva and gastric juice in gastric disease, III, 62.
 Stenger, K., treatment of influenza and pneumonia with sulphonamide-pyridine, III, 611. Serum changes in infectious diseases and burns, III, 651. Chemotherapy of epidemic meningitis, III, 774.
 Stenhagen, E., built-up films of esters, I, 22.
 and Rideal, E. K., interaction between porphyrins and lipin and protein monolayers, III, 1094.
 and Teorell, T., electrophoretic properties of thymonucleic acid, I, 418.
 See also Dean, R. B., Schulman, J. H., and Teorell, T.
 Stenvinkel, G., explanation of intensity distribution in spectrum of aluminium hydride, I, 401. Penetration of the potential barrier and formation of AlH₃, I, 448.
 Stenzl, H. See Fichter, F.
 Stepanek, J. See Krauz, C.
 Stepanov, B. I., and Nikolaev, V. I., annual cycles of salt lakes which have salt deposits, I, 391.
 Stepanov, N. I., singular point in the mass-action law diagram for a compound AB₂ formed from one atom of the first component and an even number of atoms of the second component, I, 261.
 Stepantzeva, T. G. See Lozovoi, A. V.
 Stephan, H. See Dilthey, W.
 Stephan, R. M., p_H of the dental plaque, III, 155.
 Stephen-Lewis, F. V., chemical composition and possible effects of *Carpobrotus edulis*, N.E.Br., III, 1112.
 Stephens, J. G., concentration and sedimentation rates of blood from splenic artery and vein, III, 116. Size of spleen in relation to blood sedimentation rate, III, 358. Prolongation of red cell life by spleen, III, 358.
 Stephens, R. E., spectral emissivity and relation of true temperatures and brightness temperatures of platinum, I, 557.
 Stephens, W. E. See Staub, H.
 Stephenson, C. C., and Hooley, J. G., heat capacity of potassium dihydrogen phosphate at the Curie point, I, 515.
 and McMahon, H. O., free energy of ammonia, I, 190. Rotational partition function of the water molecule, I, 552.
 Stephenson, G. E. See Hall, G.
 Stephenson, L. W. See Ross, C. S.
 Stephenson, M., bacterial metabolism, III, 427.
 See also Gale, E. F.
 Stephenson, S. T., curved-crystal ionisation spectrometer for X-rays, I, 221.
 Stepp, W., coffee and caffeine as poisons and as drugs, III, 185.
 and Kirchmann, L., action of quinidine-sympathol in auricular fibrillation, III, 505.
 and Schroeder, H., vitamin-C requirements and hypovitaminosis-C, III, 704.
 Steppun, O. A., hypotensive tissue constituents, III, 458.
 Sterling, E. C., and Bogert, M. T., synthesis of 12-methylperhydroretene (abietane) and its non-identity with fichtelite, II, 206.
 Stern, B. See Kaplan, I.
 Stern, B. E. See Smith, E. Lester.
 Stern, G. See Lespagnol, A.
 Stern, K., the nucleus ruber magnocellularis and its efferent pathway in man, III, 31. Chemical study on fluids obtained from cerebral cysts, III, 672. Severe dementia with thalamic degeneration, III, 829.
 See also Deutschberger, O., and Smyth, G. E.

- Stern, K. G., and Lavin, G. I., ultra-violet absorption spectrum of catalase, II, 42.
- Stern, L. S., blood-brain barrier, and cerebrospinal fluid (c.s.f.) in trauma and shock, III, 375.
- Stern, O., molecular ray method for separation of isotopes, I, 104.
- Stern, W., Kravetz, B., and Sokolik, A., auto-inflammation of gaseous mixtures at short [time] lags. I. Auto-inflammation of mixtures of hydrogen with air, II, 203. Action of carbon dioxide on the auto-inflammability of a hexane-air mixture, I, 205.
- Sternbach, L., constitution of abietic acid; di-, tetra-, and chloro-hydroxyabietic acids, and their oxidation products, II, 225.
- Sterne, J., Bovet, D., and Henry, C., effect of 2-diethylaminooctoxydiphenyl (1262 F.) on electrocardiogram, III, 613.
- Bovet, D., and Leneir, J., effect of diethylaminomethylbenzodioxan (883 F.) on induced myocardial lesions, III, 613.
- See also Bovet, D.
- Sternfeld, E. See Kharasch, M. S.
- Stetson, R. E. See Levine, P.
- Stetter, G., and Jentschke, W., 3·2-Me.v. γ -radiation from the excited Th-D nucleus, I, 171.
- Steubing, W., Keil, A., and Stolpe, F., comparative measurements on the Stark effect of deuterium and hydrogen, I, 393.
- Steudel, H., action of caffeine-containing and caffeine-free coffee on metabolism, III, 299.
- Steudel, W., relation of capillaries to the skeletal musculature in amphibia, III, 25.
- Steup, A., determination of the maximal rate of propagation of the air during expiration, III, 240.
- Stevens, J. M., cohesion of simple compounds. I.—III, I, 248, 603. Cold flames. I.—III, I, 568.
- Steven, D. See Wald, G.
- Stevens, C. See Prickett, C. O.
- Stevens, F. A., and Jordan, L., sensitisation to jute, III, 92.
- Stevens, Henry. See Coulson, E. J., and Spies, J. R.
- Stevens, J. R. See Stiller, E. T.
- Stevens, M. F. See Glenny, A. T., and Pope, C. G.
- Stevens, P. G., reduction of α -halogeno-ketones; synthesis of *dl*- ψ -ephedrine, II, 61. Rearrangement of α -hydroxycarbonyl compounds, II, 428.
- and Deans, S. A. V., preparation of ethers, II, 531.
- Higbee, W. E., and Armstrong, R. T., influence of branched chains on optical activity; configuration of propyl-*tert*-butylcarbinol; relation between rotatory power and chemical character, II, 2.
- and McNiven, N. L., halogenation of optically active *tert*. carbinols, II, 296.
- Stevens, R. E., new analyses of lepidolites and their interpretation, I, 109.
- Stevens, S. S. See Youtz, R. E. P.
- Stevenson, A. F., calculation of energies of two-electron configurations from Hartree functions; application to $2p^2$ terms in O III, I, 594.
- Stevenson, D. See Hirschfelder, J. O.
- Stevenson, D. P., thermodynamic functions of cyanogen and the cyanogen halides, I, 247.
- Stevenson, D. P., and Beach, J. Y., electron-diffraction investigation of molecular structures of hydrogen disulphide, dimethyl disulphide, and sulphur dichloride, I, 65.
- Burnham, H. D., and Schomaker, V., molecular structure of acetaldehyde, I, 601.
- LuValle, J. E., and Schomaker, V., structure of formaldehyde from electron diffraction, I, 554.
- See also Beach, J. Y.
- Stevenson, F. E. See Wilson, A. T.
- Stevenson, L. D., pathological changes in the nervous system in yellow fever, III, 467.
- Stevenson, L. S., rhyodacite from the Tranquille plateau, British Columbia, I, 587.
- Steward, C. J. See Carpenter, L. G.
- Steward, F. C., and Harrison, J. A., absorption and accumulation of salts by living plant cells. IX. Absorption of rubidium bromide by potato discs, III, 799.
- See also Hoagland, D. R.
- Steward, W. D., new tuberculin patch test, III, 104.
- Stewart, C. D., Clark, D. E., Dragstedt, L. R., and Becker, S. W., experimental use of lipocaine in treatment of psoriasis, III, 1058.
- See also Ginsberg, J. E.
- Stewart, C. E. See Boldyreff, W. N.
- Stewart, C. P., dark adaptation test, III, 903.
- See also Lowdon, A. G. R.
- Stewart, D. See Lewinsky, W.
- Stewart, Donald, public health services and industrial hygiene, III, 619.
- Stewart, D., *jun.*, petrography of S. Victoria Land rocks, I, 435.
- Stewart, D. W., induced radioactivity in strontium and yttrium; nuclear isomers in strontium, I, 591.
- See also Fajans, K.
- Stewart, G. N. See Rogoff, J. M.
- Stewart, G. W., vesuvianite and fluorescent apatite from Center Strafford, New Hampshire, I, 496.
- Stewart, G. W. (Iowa), apparent molar ionic volumes in aqueous solutions of strong electrolytes, I, 364.
- Stewart, H. C. See Elkes, J. J., and Frazer, A. C.
- Stewart, H. J., management of hypertension, III, 239.
- Crane, N. F., and Deitrick, J. E., effect of 2·4-dinitrophenol on cardiac output and circulation in human beings, III, 360.
- Crane, N. F., Deitrick, J. E., and Thompson, W. P., action of digitalis in compensated heart disease, III, 182. Action of digitalis in uncompensated heart disease, III, 182.
- Deitrick, J. E., Watson, R. F., Wheeler, C. H., and Crane, N. F., effect of valvular heart disease on dynamics of the circulation, III, 18.
- and Heuer, G. J., circulation in constrictive pericarditis, III, 561.
- Stewart, H. L., influence of castration on induction of subcutaneous tumours in mice of the C_3H strain by 1:2:5:6-dibenzanthracene, III, 988.
- and Cantarow, A., experimental carbon tetrachloride poisoning in the cat. II. Influence of ligation of single bile ducts, III, 185.
- Stewart, H. L., and Pratt, J. P., sulphanilamide excretion in human breast milk, III, 303. Effect of prolactin on mammary gland secretion, III, 1056.
- See also Cantarow, A., and Tocantins, L. M.
- Stewart, Jane. See Elsberg, C. A.
- Stewart, (Miss) Jessie. See Morgan, (Sir) G. T.
- Stewart, J. D., Rourke, M., and Allen, J. G., acetylation of sulphanilamide, III, 710.
- See also Gregersen, M. I.
- Stewart, J. K., and Pohle, F. J., effect of calcium in determination of prothrombin, III, 354.
- Stewart, M. J., Willis, R. A., and De Saram, G. S. W., argentaffine carcinoma (carcinoid tumour) arising in ovarian teratomas, III, 979.
- Stewart, R. M., case of arachnodactyly, III, 542.
- Stewart, T. D., accessory sacro-iliac articulations in the higher primates and their significance, III, 111.
- Stewart, T. D. (California), and Li, C., kinetics and mechanism of α -aminoisobutyronitrile formation, I, 32.
- Stewart, V. E., micro-identification of metrazol [cardiazol] in mixed aqueous solutions, III, 886.
- Stewart, W. G. See Thomas, A. W.
- Stewart, W. S., Bergren, W., and Redemann, C. E., plant growth inhibitor, III, 535.
- Stewart-Wallace, A. M., unusual case of grasp reflex; volitional and reflex components, III, 670.
- Stieb, B. See Klodt, W.
- Stieglitz, E. J., sodium ferrocyanide test of glomerular function, III, 1060.
- Stiegman, C. A. See Bailar, J. C., *jun.*
- Stiehl, K. See Hahn, G.
- Stiehler, R. D., and Flexner, L. B., mechanism of secretion in the choroid plexus; conversion of oxidation-reduction energy into work, III, 170.
- See also Flexner, L. B.
- Stier, T. J. B., and Newton, M. I., changes in rate of respiration of bakers' yeast during assimilation, III, 789.
- Newton, M. I., and Sprince, H., relation between increase in opacity of yeast suspensions during glucose metabolism and assimilation, III, 520.
- Stierlen, G., cerebral blood supply and increased cerebrospinal fluid pressure, III, 659.
- Stieve, H., injurious effects of caffeine on organs, III, 311. Culturo of adult human spleen, III, 453.
- Stifter, W. C., *jun.* See Hodes, H. L.
- Stigler, R., physiological changes in high altitudes, III, 662.
- Stiles, M. H., sedimentation rate in chronic illness, III, 648.
- See also Chapman, G. H.
- Stiles, W., physiology of the plant cell, III, 338.
- Stiles, W. directional sensitivity of the retina, III, 675. Directional sensitivity of retina and spectral sensitivities of rods and cones, III, 753.
- See also Collier, L. J.
- Stiles, W. W. See Morrow, G.
- Stille, U. See Cario, G.
- Stiller, E. T., Keresztesy, J. C., and Stevens, J. R., structure of vitamin-B₆. I. II, 340.
- See also Harris, S. A.

- Stilwell, E. P., chick heart muscle in tissue culture, III, 16.
- Stimson, H. F. See Osborne, N. S.
- Stinchcomb, G. A., infra-red absorption spectrum of *n*-pentane, I, 549.
- Stippel, F., and Vollers, H., appearance of small coloured fields and its significance, III, 676.
- Stirn, F. E., Arnold, A., and Elvehjem, C. A., relation of dietary fat to thiamin requirements of growing rats, III, 1069.
- Stirnemann, F., crawl and walk phenomenon of newborns, III, 130.
- Stitt, F., infra-red and Raman spectra of polyatomic molecules. VII. Hexadeuterethane, I, 354.
- and Coryell, C. D., magnetic study of the equilibrium between ferrohæmoglobin, cyanide ion, and cyanide ferrohæmoglobin, I, 370.
- See also Kistiakowsky, G. B.
- Stitz, B., interference of antigens, III, 879.
- Stitz, F. See Look, G.
- Stiven, D. See Westwater, J. O.
- Stock, A., micro-determination of mercury and its application to hygiene and medicine, III, 188.
- Stock, A. H., clarification of meat infusion, III, 1108.
- Stockbarger, D. C., and Cartwright, C. H., lithium fluoride-quartz achromatic lenses, I, 280.
- Stocker, E. See Kohlschütter, V.
- Stocker, O., Rehm, S., and Paetzold, I., short-period measurements of assimilation [in plants], III, 436.
- Stockert, R. See Schwarz, K. E.
- Stockholm, M. See Althausen, T. L.
- Stockton, A. B. See De Eds, F.
- Stoddard, M. P. See Marvel, C. S.
- Stoddart, E. M., reaction between oxygen and nitric oxide, I, 148.
- Stodola, F. H., Lesuk, A., and Anderson, R. J., lipins of tubercle bacilli. LIV. Mycolic acid, II, 48.
- See also Butenandt, A.
- Stodtmeister, R., chronic intoxication with benzene and its action on the bone marrow, III, 3. Causation of toxic alterations of neutrophils, III, 647.
- and Büchmann, P., effect of sternal puncture on blood formation, III, 890.
- Stockert, M. See Hauptstein, P.
- Stöger, R. See Gerstner, K.
- Stöhr, H., allotropy of arsenic, I, 599.
- and Klemm, W., two-component systems with germanium. I. Germanium-aluminium, germanium-tin, and germanium-silicon, I, 419.
- Stöhr, L., preparation of methylallylcarbinol, II, 355.
- Stöhr, P., jun., microscopic innervation of blood vessels, III, 19. Structure and terminations of the autonomic nervous system, III, 471. Anatomy and physiology of stomach, III, 757.
- Stöhr, R., glycogen formation from dicarboxylic acids, III, 174. Liver- and muscle-glycogen in fasting rats after overdosage with glucoplastic amino acids, III, 500. Serum-calcium in chronic fluoride poisoning, III, 617.
- Stormer, C., blue sunlit aurora rays and their spectrum, I, 50. Red auroral lines on September 14—16th, I, 167.
- Störing, F. K. See Umber, F.
- Stoesser, A. V., influence of ingestion of raw and desiccated pancreas on blood-lipins during infection, III, 985.
- Stötter, G., treatment of diabetes with protamine-insulin, III, 51.
- See also Lührs, W.
- Stoetzer, W. See Müller, Ernst.
- Stogni, N. I., semi-automatic pipette for rapid and exact delivery of solutions, I, 44.
- Stoian, I. See Ionescu, N. G.
- Stoiber, R. E. See Bannerman, H. M.
- Stoicovich, E., and Gliszczynski, S. von, morphological constants of double salts of the type $R_2SO_4 \cdot (piperazine, H_2SO_4) \cdot 6H_2O$, I, 554.
- Stokes, J. See Aldrich, C. A., Morrison, A. P., and Shaw, D. R.
- Stokes, J. A., jun. See Friedman, H. B.
- Stokinger, H. E., use of sulphapyridine (M. & B. 693) in treatment of pneumonia, III, 774. Absorption, acetylation, and excretion of M. & B. 693, III, 858.
- See also Lockwood, J. S., and Warren, J.
- Stokinger, W., disturbances of carbohydrate metabolism in diseases of biliary system, III, 925.
- Stokland, K., Ronæss, E., and Tronstad, L., dilatation of heavy water, I, 191.
- Stokstad, E. L. R., and Manning, P. D. V., effect of riboflavin on incidence of curled toe paralysis in chicks, III, 74.
- Stokvis, B., Traube-Hering blood pressure waves in man [schizophrenia], III, 35.
- and Naerebout, A., medico-legal implications of starvation, III, 848.
- See also Hoelandt, N.
- Stolfi, G., Lalli, A., and Garofali, V., biochemistry of scalding and traumatic shock. IX. Plasma-proteins and non-protein-nitrogen of the blood, III, 119.
- and Provenzale, L., residual nitrogen of blood after scalding, III, 652.
- Provenzale, L., and De Amicis, D., biochemistry of anæmias; residual nitrogen and its fractions, III, 741.
- See also De Ritis, F.
- Stoll, A., and Renz, J., cardiac glycosides. XV. Periplocin, the genuine cardiac glycoside of *Periploca graeca*, II, 494.
- Stoll, M., and Bolle, P., odour and constitution in the series of deca- and undeca-lactones, II, 5.
- and Rouve, A., synthesis of *cis*- Δ^7 -hexenol (natural hexenol), II, 2. Kinetic examination of cyclisation problems and the preparation of lactones, II, 4.
- Stoll, R., influence of agenesis of hypophysis and thyroid on development of chick embryo, III, 754.
- Stoloff, B. See Dorff, G. B.
- Stolpe, F. See Steubing, W.
- Stolyhwo, N., localised cutaneous immunity based on the Schwartzman reaction, III, 529.
- Stolz, H. R. See Mitchell, H. H.
- Stolz, J. See Schovanec, B.
- Stolzmann, Z., quantitative variations in urea and residual nitrogen in human erythrocytes and plasma during fasting and digestion of proteins, III, 817.
- Stone, A. M. See Lamar, E. S.
- Stone, C. P., copulatory activity in adult male rats following castration and injections of testosterone propionate, III, 590.
- Stone, C. S. See Elliot, A. H.
- Stone, H. W., and Weiss, L. C., sintered-glass filters and bubblers of pyrex, I, 341.
- Stone, M. J. See Strickler, A.
- Stone, R. E. See Spies, T. D.
- Stone, R. W., rock-salt in Pennsylvania, I, 344.
- Stone, W. E., effects of anæsthetics and convulsants on lactic acid content of the brain, III, 186.
- Stoneburg, C. A., lipins of cell nuclei, III, 890.
- Stoner, E. C., collective electron ferromagnetism. II. Energy and specific heat, I, 247. Thermodynamic functions of a Fermi-Dirac gas, I, 557.
- Stones, H. H., investing tissues of the teeth, dentine, and dental pulp, III, 279.
- Stokey, S. D. See Bingham, E. C.
- Stora, R., and Teherneakofsky, P., creatinuria in dementia præcox, III, 596.
- See also Claude, H.
- Storch, K. See Müller, O.
- Storch, T. J. C. von, complications following the use of ergotamine tartrate, III, 309.
- See also Putnam, T. J.
- Storch, W., alkali-forming bacteria in raw milk, III, 428.
- Stork, G. K. B. See Fernando, P. B.
- Storks, K. H. See Germer, L. H.
- Storms, L. B. See Hartman, R. J.
- Story, R. V. See Cholak, J.
- Stosiek, A. J., electron diffraction investigation of phosphorus sulphoxide, $P_4O_5S_6$, I, 359. Determination of molecular structure of tetranitromethane by the electron diffraction method, I, 359.
- Stott, R. See Burgert, P. H.
- Stotz, E. See Horecker, B. L.
- Stoughton, R. W., Dickison, H. L., and Fitzhugh, O. G., diacylcarbamides. II. Preparation and properties of diacylcarbamides derived from branched-chain aliphatic acids, II, 145.
- and Rollefson, G. K., influence of ionic strength on quenching of fluorescence in aqueous solutions, I, 597.
- Stour, M. L. See Pepper, J. R.
- Stout, J. W., and Barieau, R. E., effect of a magnetic field on electrical resistance of gold and silver at temperatures between 1° and 20° K., I, 187.
- See also Giauque, W. F.
- Stovall, W. D. See Robinson, C. L.
- Stover, R. F., and Pratt, J. P., pregnanediol excretion, III, 265.
- Stoves, J. L. See Clark, C. H. D.
- Stowe, W. J. I. See Ramage, G. R.
- Stowe, W. P., rose-Bengal excretion and hippuric acid synthesis tests for liver function; a comparison, III, 691.
- Stowell, A. See Wintrobe, M. M.
- Stoyanoff, V. A. See Sperry, W. M.
- Straaten, T., and Hünemann, M., blood-sugar regulation after gastric operations, III, 757.
- Strachova, G. See Lepin, L. K.
- Strack, E., and Försterling, K., biological action of esters of crotonobetaine, III, 411.
- Strain, C. V., proton-induced radioactivities. II. Nickel and copper targets, I, 116.
- See also Barnes, S. W., and Buck, J. H.
- Strain, H. H., combination of electrophoretic and chromatographic adsorption methods, I, 367. Formation of carotenoids and chlorophylls in etiolated barley seedlings exposed to red light, III, 213. Carotene. XI. Isolation and detection of *a*-carotene and the carotenes of carrot roots and of butter, III, 343.
- Strain, W. H. See Dobriner, K.
- Strasberg, A. See Ratner, M.

- Strashenko, D. M., adsorption of electrolytes from non-aqueous solutions, I, 22. Shock in internal diseases, III, 363.
- Strassmann, E. O., theca-interna cone and its rôle in ovulation, III, 262. Fœtal electrocardiography, III, 455.
- and Hussey, R. D., technique and results of routine fœtal electrocardiography during pregnancy, III, 1030.
- Strassmann, F. See Hahn, O.
- Strat, C. See Frasin, I.
- Straten, F. W. van, and Ehret, W. F., apparatus for conducting reactions and extractions in special atmospheres, I, 224. Reaction of zinc with copper sulphate in aqueous solution, I, 487.
- Strating, J. See Backer, H. J.
- Straub, F. B., flavoprotein of heart muscle tissue, III, 359. Isolation and properties of a flavoprotein from heart muscle, III, 719.
- Corran, H. S., and Green, D. E., mechanism of the oxidation of reduced co-enzyme I, III, 516. Reduction of heart flavoprotein, III, 563.
- See also Corran, H. S.
- Straub, J., and Török, T., distribution of goitre in Hungary and its relation to the radioactivity of soil and drinking water, III, 908.
- Straub, W., coffee and caffeine, III, 185. Psychic effects of alcohol and alcohol content of blood, III, 863.
- Straube, G., and Beck, H., micro-analysis of lead in body fluids [in lead poisoning], II, III, 715.
- See also Beck, H.
- Straumanis, M., Ievins, A., and Karlsons, K., dependence of the lattice constant on wave-length; lattice constants of LiF, NaF, As₂O₃, TiCl₃, and TiBr₃, I, 184.
- and Ogrins, B., gravimetric determination of molybdenum as molybdenum trioxide, I, 432.
- Straus, W. See Karrer, P.
- Strauss, F., fertilisation and ovulation in *Ericulus*: family Centetidae, III, 738.
- Strauss, H., and Rahm, W. E., jun., reactions of the electroencephalogram to metrazol injections, III, 832.
- Strauss, L. H., and Scheer, P., action of nicotine on inorganic constituents of blood. I, III, 416. Effect of nicotine on threshold of vitamin-C, III, 922.
- Strauss, M. B., aetiology of toxæmias of pregnancy, III, 58, 143.
- See also Spain, W. C.
- Strauss, M. J. See Haggard, H. W.
- Strauss, R. See Georgi, F.
- Strayhorn, W. D. See Burwell, C. S.
- Strébel, A. See Cornubert, R.
- Streck, E., breakdown of zinc sulphide by light and α -rays, I, 58. Breakdown of zinc sulphide by α -rays, I, 355.
- Strecker, E. A., Alpers, B. J., Flaherty, J. A., and Hughes, effects of metrazol convulsions, III, 672.
- See also Freed, H.
- Strecker, G. See Bursi, H. W.
- Strecker, W., and Schwinn, introduction of the azide group into complex salts, II, 250.
- Streck, R. See Helferich, B.
- Streef, G. M., sodium and calcium contents of erythrocytes, III, 350.
- and Streef-Spaan, A. M., composition of normal blood-protein [in East Indian natives and Chinese], III, 356.
- Streef-Spaan, A. M. See Streef, G. M.
- Street, D. M. See Harrell, G. T.
- Street, H. R., and Cowgill, G. R., acute riboflavin deficiency in the dog, III, 766.
- Street, J. A. See Warren, J.
- Street, J. C., cloud chamber studies of cosmic-ray showers and penetrating particles I, 400.
- Street, S. F. See Ramsey, R. W.
- Strehle, J. See Durr, K.
- Streiff, E. B. See De Morsier, G.
- Strelkov, P. G. See Kapitza, P. L.
- Strell, M. See Fischer, Hans.
- Stremmel, R., uleron treatment of male gonorrhœa, III, 410.
- Streng, K. O., spontaneous formation and elimination of acetone from liver, III, 758. Utilisation of glycerol by *B. tuberculosis*, III, 1013.
- Streuly, P. See Barger, G.
- Strickler, A., and Stone, M. J., sulphanilamide in treatment of pyogenic dermatoses, III, 1080.
- Strickler, H. See Bovet, D., and Trefouel, J.
- Strickroot, F. L. See Schaefer, R. L.
- Strieck, F., experiments on cerebral diabetes, III, 31. Experimental and clinical studies on new insulins, III, 50.
- See also Skraup, S.
- Strietmann, W. L. See Krueger, A. P.
- Stroebe, P. See Scheller, H.
- Stroer, W. F. H., harelip in an 18-mm. human embryo, III, 1022.
- and Zwan, A. van der, anencephaly and rhachischisis posterior with the description of a human hemicephalus of 18 mm., III, 542.
- Strom, J., use of heparin or citrate for sedimentation rate determination, III, 116.
- Strom-Olsen, R., Greville, G. D., and Lennon, R. W., hippuric acid synthesis in schizophrenia, III, 35.
- Stromgren, B., helium and hydrogen content of the interior of the stars, I, 50. Physical state of interstellar hydrogen, I, 501.
- Strohfeldt, E., systems copper-zinc-sulphur and lead sulphide-cuprous sulphide-zinc sulphide, I, 524.
- Strohl, A., comparative efficacy of ascending and descending currents in different parts of nerve, III, 827.
- and Djournio, A., establishment of electrotonic potential differences in nerve, III, 28. Interpretation of different efficacy of ascending and descending currents in different parts of nerve, III, 827.
- Stromberg, A. See Karpatshev, S.
- Stromberg, A. G., relation between viscosity and concentration of mixtures of molten salts, I, 517.
- Strong, F. M., Madden, R. J., and Elvehjem, C. A., ineffectiveness of 3-aminopyridine in black-tongue, III, 75.
- See also Snell, E. E.
- Strong, J., uses for synthetic-rubber-like substances in vacuum technique, I, 341.
- Strong, K. C., structure of the media of distributing arteries by the method of micro-dissection, III, 644.
- Strong, L. C., synergistic effect of heptaldehyde and methyl salicylate on spontaneous tumours of the mammary gland in mice, III, 698. Liquefaction of spontaneous tumours of mammary gland in mice by heptaldehyde, III, 699.
- See also Bergmann, W., Burr, H. S., Francis, L. D., and Lits, F. J.
- Strong, T. H., and Trumble, H. C., excretion of nitrogen by leguminous plants, III, 533.
- Strongin, H., tension pneumothorax in newborn, III, 1033.
- Strookman, T. A. See Haslewood, G. A. D.
- Stross, F. H., and Branch, G. E. K., chemiluminescence of 3-aminophthalhydrazide, II, 183.
- Strothers, J. E. See Curran, S. C., and Dee, P. I.
- Strott, A., influence of environmental conditions on formation of chloroplast pigments, III, 636.
- Stroud, E. See Weston, H. C.
- Stroud, S. W. See Callow, N. H.
- Strow, H. A. See De Vries, T.
- Strubl, R., polarographic studies with dropping mercury electrode, VIII. Titanometry. LXXV. Determination of uranium and other heavy metals in [presence of] excess of iron, I, 101.
- Struck, H. C., Reed, C. I., and Cohen, J. L., acid-soluble phosphorus content of muscle of rats under various diet modifications, III, 493.
- Struckmeyer, B. E. See Roberts, R. H.
- Strughold, H., reflex activity in the sub-stratosphere, III, 462.
- Strumza, M. See Binet, L.
- Strunz, H., eusynchite, arðoxene, pyrobelonite, and descloizite, I, 497. Identity of monite, zeugite, spodiosite, and apatite, I, 497. Use of the true-angled triangular projection, I, 587.
- See also Günther, P.
- Struve, O., physical state of interstellar gas clouds, I, 176.
- and Wurm, K., excitation of absorption lines in outer atmospheric shells of stars, I, 2.
- Wurm, K., and Henyey, L. G., astrophysical consequences of metastable levels in hydrogen and helium, I, 227.
- Struve, W. S. See Bachmann, W. E.
- Stryker, G. B., inexpensive apparatus to hold shockproof X-ray cables out of the way, III, 1094.
- Stuart, A. H. See Mosettig, E.
- Stuart, C. A. See Wheeler, K. M.
- Stuart, C. W. See Miller, H. C.
- Stuart, E. H., Powell, Horace M., Rose, C. L., and Bibbins, F. E., sulphanilamide additive compounds with cinchona alkaloids, II, 232.
- Stuart, H. A., and Buchheim, W., relation between the degree of depolarisation of molecularly scattered light in liquids, and the Kerr constant, I, 10.
- See also Buchheim, W., and Peterlin, A.
- Stuart, H. C., mortality among infants and children and progress in reduction of rates from certain causes, III, 1092.
- Stuart, H. O., and Hart, C. P., effect of different calcium intake levels on egg production, shell strength, and hatchability, III, 600.
- Stuart, N. W., and Marth, P. C., composition and rooting of American holly cuttings as affected by treatment with indolylbutyric acid, III, 802.
- Stuart-Harris, C. H., neurotropic strain of human influenza virus, III, 530.
- Stubbe, H. See Kausche, G. A.
- Stubblefield, E. M. See Collins, G. B.
- Stubbs, A. L. See Morton, R. A.
- Stubbs, J. J. See Lockwood, L. B.
- Stubbs, M. F. See Johnson, Warren C.

- Stubenrauch, C. H., jun. See Poncher, H. G.
- Stuber, L. S. See Wright, R. W.
- Stuber, R., operation of spark counter, I, 390.
- Stuchlik, V., influence of conditions of production of yeast on composition of the cytoplasm, III, 200.
- Štucin, D. See Klemen, R.
- Stuck, R. M., and Reeves, D. L., dangerous effects of thorotrast used intracranially; experimental production of hydrocephalus, III, 253.
- Studer, F. J. See Schmidt, F. C.
- Studer, S. See Ruzicka, L.
- Studnička, F. K., the word "protoplasm," III, 488.
- Studt, E. See Klein, Wilhelm.
- Stüber, C. See Thiessen, P. A.
- Stueck, G. H. See Flaum, G.
- Stueckelberg, E. C. G., rigorous theory of interaction between nuclear particles, I, 56. Theory of mesons and nuclear forces, I, 352. New model of the point charge electron and of other elementary particles, I, 547.
- and Patry, J. F. C., interaction between nuclear particles, I, 595.
- Stücklen, (Miss) H., determination of extinction coefficients using the hydrogen lamp as light source, I, 237. Use of the hydrogen lamp in absorption spectroscopy. II, I, 580.
- See also Carr, (Miss) E. P.
- Stückradt, H., pharmacology of 3:6-diaminocholestane, III, 866.
- Stühmer, A., treatment of skin diseases, III, 716.
- Stull, A., and Sherman, W. B., allergenic activity of protein-nitrogen and non-protein fractions of ragweed pollen extract, III, 618.
- Stultz, W. A., use of plastic materials for operations on amphibian embryos, III, 225.
- Stumpf, K. E., determination of particle number of aero-colloid systems with the slit ultramicroscope and the process of aggregation in aerosols, I, 257.
- Stuppy, C., use of eunarcon in obstetrics, III, 87.
- Sturdy, R. S. See Craik, K. J. W.
- Sturza, S. A., mechanism of lysis of *Pneumococcus* by bile salts; antigenic properties of *Pneumococcus* autolysin; sensitivity of *Pneumococcus* autolysin to ultra-violet rays, III, 103.
- Sturges, D. G., potentiometric determination of zinc, I, 430.
- Sturges, S., and Knudson, A., application of the Schoenheimer-Sperry method to the determination of cholesterol and cholesterol esters in tissues, III, 221.
- Sturgis, B. M. See Norris, J. F.
- Sturgis, C. C., differential diagnosis and treatment of pernicious anaemia, III, 228.
- and Goldhamer, S. M., macrocytic anaemia, III, 351.
- Isaacs, R., Goldhamer, S. M., and Bethel, F. H., blood, III, 810, 1024.
- Sturm, A., Schmidt, W., and Beck, J., antagonism to pituitary thyrotropic hormone, III, 137.
- and Voges, H., analysis of action of veritol on circulation by means of "stufentonosphygmogram," III, 864.
- Sturrock, M. G., and Lawe, T., systems chrysene-1:2-benzanthracene and 1:2-benzanthracene-triphenylene, I, 322.
- Sturtevant, J. M. See Drew, R. D.
- Sturtevant, M. See Ehrenfeld, I.
- Stutzman, J. W. See Orth, O. S.
- Style, D. W. G. See Slotin, L., and Snowden, F. F.
- Styles, S. A. See Roberts, O.
- Stzibarovskaja, N. P. See Levina, M. I.
- Su, G. J. See Beattie, J. A.
- Su, T. F., Hunan [China] local food products. III. Vitamin-C content of "vegetable water," III, 76.
- Subbaraya, T. S. See Sibaiya, L.
- Subbarow, Y., and Dann, W., inactivity of 3-aminopyridine in black-tongue, III, 75.
- and Hitchings, G. H., pantothenic acid as factor in rat nutrition, III, 853.
- and Rane, L., pantothenic acid as a growth factor for the Dochez NY5 strain of haemolytic *Streptococcus*, III, 876.
- Subrahmanyam, V., Duckworth, J., and Godden, W., quantitative separation of skeleton of small animals, III, 953.
- Subramaniam, K. S. See Carter, F. D.
- Subramaniam, M. K., structure of the Golgi apparatus. V. Idiosome in the pancreas of the toad and its relation to the ergastoplasm, III, 808.
- Suby, H. I. See Barney, J. D.
- Sucharda, E., and Troszkiewiczówna, C., centigram method of determining carbon and nitrogen in organic compounds, II, 235.
- See also Kuczyński, H.
- Suchich, V. A., photo-electric nephelometer-colorimeter, I, 43.
- Sucksmith, W., measurement of magnetic saturation intensities at different temperatures, I, 390. Magnetic study of the iron-nickel-aluminium system, I, 518.
- Sudzuki, See under Suzuki.
- Sue, P., formation of sodium metaniobate from niobium tetroxide and oxygenated sodium salts, I, 211. Chlorination of niobium pentoxide and tetroxide, I, 273. Thermal equilibrium between niobium tetroxide and water, I, 322. Niobium tetroxide, I, 382. Niobium chlorides, I, 382.
- Suehiro, S. See Mitsuba, K.
- Süllmann, H., inhibition of lactic acid formation in muscle extracts by glyceraldehyde, III, 423.
- and Birkhauser, H., enzymic breakdown of *O*-acetylneurin and action of aneurin on choline-esterase, III, 1070.
- Sümeği, S. See Putnoky, J.
- Suer, W. See Fischer, M. H.
- Sueyoshi, Y., and Michimoto, H., tissue content of highly unsaturated kephalin during avitaminosis-C, III, 1072.
- and Miura, K., unsaturated fatty acids of phosphatides of tumours, III, 991.
- Suffolk, S. F. See Mellanby, J.
- Suffolk and Berkshire, (Earl of), pharmacological action of acridine derivatives, III, 929.
- Suga, T. See Takamine, T.
- Sugahara, T. See Kariyone, T.
- Sugai, T. See Yanagisawa, K.
- Sugar, O., and Gerard, R. W., anoxia and brain potentials, III, 373.
- Sugarman, H., sedimentation rate in anaemia, III, 550.
- Sugasawa, S., and Kakemi, K., synthesis of dibenzopyridocoline derivatives. II. Syntheses of 4':5'-dimethoxy-4'':5''-methylenedioxy-3:4:5:6-tetrahydro-(1':2':1'':2'':7:8-dibenzopyridocoline) and the corresponding tetramethoxy-derivative, II, 281. Syntheses of nitrogen ring compounds. XVI. Syntheses of dibenzoquinolizine derivatives. II. Synthesis of 4':5'-dimethoxy-4'':5''-methylenedioxy-3:4:5:6-tetrahydro-1':2':1'':2'':7:8-dibenzopyridocoline and the corresponding tetramethoxy-compound, II, 343.
- Kakemi, K., and Kazumi, H., synthesis of dibenzopyridocoline derivatives. III. Synthesis of 3':4':3'':4''-tetramethoxy-1:4:5:8-tetrahydro-(1':6':2:3:1'':6'':6:7-dibenzopyridocoline), II, 521.
- Kakemi, K., and Tsuda, T., syntheses of nitrogen ring compounds. XII. Synthesis of quinoline derivatives. II. Synthesis of 6:7-dimethoxyquinoline, II, 447.
- and Kodama, K., syntheses of nitrogen ring compounds. XIV. Synthesis of partly hydrogenated phenanthridine derivatives. I, II, 283.
- Sakurai, K., and Sugimoto, N., syntheses of nitrogen ring compounds. XVII. Synthesis of some 1:2-polymethylene-tetrahydroquinolines, II, 281.
- Satoda, I., and Yanagisawa, syntheses of nitrogen ring compounds. XIII. Synthesis of indole derivatives. I. New synthesis of indole, II, 387.
- and Sugimoto, N., oxidation of β -phenylethyl-pyridinium and -quinolinium salts, II, 281. Syntheses of nitrogen ring compounds. XV. Oxidation of β -phenylethyl-pyridinium and -quinolinium salts, II, 343.
- Sugawara, K., dichotomous microstratification of μ R, I, 107.
- Sngden, S. See Le Roux, L. J., and Lu, C. S.
- Sugi, M., irritability of single skeletal muscle fibres. II. Stimulation by elliptical capillary electrodes, III, 463.
- Sugihara, G., hourly variation of urea content in human blood and in human milk after internal use of urea, and its effect on Arakawa's reaction, III, 653. Arakawa reaction and urea content in human milk and blood, III, 696.
- and Miyazaki, S., effect of ingestion of salt and urea on Arakawa reaction of milk, III, 395.
- Sugihara, N., influence of substances opaque to X-rays on narcosis, III, 312.
- Sugimoto, A., energy levels of the ^{24}Mg nucleus, I, 4.
- See also Amaki, T.
- Sugimoto, E., case of periodic paraplegia, III, 465. Action of potassium iodide and di-iodotyrosine on tissue oxidase, III, 579. Action of the throxine and acid alcohol extract of thyroid gland on tissue oxidase, III, 579. Action of various thyroid preparations on the tissue indophenol-oxidase. I. and II., III, 579.
- Sugimoto, K. See Kawai, S.
- Sugimoto, N. See Sugasawa, S.
- Sugiura, T. See Iseki, T.
- Sugiura, Y., and Minakawa, O., neutron groups, I, 3.

- Sugiyama, G., relationship of creatine to liver-glycogenesis by bile acids, III, 594. Relationship of hypoglycæmic action of bile acids to their constitution, III, 594. Effect of tonsil extracts and bile acids on deamination of alanine, III, 626.
- See also Kimura, T.
- Sugiyama, N. See Kawai, S.
- Sugiyama, S. See Kiyono, K.
- Suh, T. H. See Doherty, M. M.
- Subonen, P. See Shurnik, L.
- Suhrmann, R., and Kundt, W., effect of adsorbed oxygen on the secondary electron emission of pure metals at 83° and 293° K., I, 510. Secondary electron emission of pure metals in the ordered and disordered state, I, 510.
- and Mittmann, A., origin of multiple spectral maxima observed with composite photo-cathodes, on the basis of spectral sensitivity curves, I, 9. Photo-electric excitation of composite photo-cathodes at low temperatures, I, 126.
- Suida, H., and Gemassmer, A., hydrocarbons of the cyclopentane series, II, 361.
- Suisto, W. W., and Ranges, H. A., renal clearances of iopax, neoiopax, and skiodan in man, III, 275.
- Suits, C. G., high-pressure arcs in common gases in free convection, I, 290.
- Sujkowski, Z., nickel-bearing slates in the Carpathians, I, 500.
- Sukhtankar, D. R. See Hirwe, N. W., and Jadhav, G. V.
- Sulkin, S. E., flocculation with staphylococcal toxin and antitoxin, III, 1013.
- Sulkowitch, H. W. See Albright, F.
- Sullivan, E. R. See Yoffey, J. M.
- Sullivan, H. R., viability and maintenance of oral strains of *Lactobacillus acidophilus*, III, 727.
- Sullivan, J. M., effect of constant gastric suction on acid-base equilibrium of the body, III, 689.
- Sullivan, M. See Padget, P.
- Sullivan, M. X., Milone, H. S., and Everitt, E. L., determination of tryptophan content of casein, II, 44.
- See also Hess, W. C.
- Sullivan, N. P., and Sears, H. J., technique for concentrating tubercle bacilli in sputum, III, 877.
- Sullivan, W. A. See Fardon, J. C.
- Sully, A. H. See Owen, E. A.
- Sully, B. D., preparation of low-temperature hydrogenation catalysts, I, 270.
- Sulman, F., and Hochman, A., progonadotropic augmentary immune sera after protracted injection of hypophyseal gonadotropic hormone in rabbits, III, 906.
- See also Zondek, B.
- Sulzberger, M. B., and Baer, R. L., sensitisation to simple chemicals. III. Relationship between chemical structure and properties, and sensitising capacities in the production of eczematous sensitivity in man, III, 416.
- and Finnerud, C. W., industrial dermatitis, III, 317.
- See also Frei, W., Goodman, J., Landsteiner, K., and Rostenberg, A., jun.
- Sulzer, R., and Duchanel, P. W., distribution of electrical potentials of the heart over the surface of the body, III, 16.
- Sumi, M., and Tsuzuki, Z., flavin (vitamin-B.) of the chrysalis of the domestic silk-worm. I. Flavin content, III, 402.
- Summer, F. B., and Doudoroff, P., temperature acclimatisation and respiratory metabolism in fishes, III, 277.
- Summerfeldt, P., and Ross, J. R., value of increased supply of vitamin-B and iron in diet of children. III, III, 1069.
- Summerson, W. H., test-tube photo-electric colorimeter, and the use of the photo-electric colorimeter in colorimetric analysis, I, 580.
- Sumner, J. B., and Dounce, A. L., catalase. II., III, 422.
- Sun, H. M. See Snapper, I.
- Sundaram, M. See Ramiah, P. V.
- Sundararajan, A. R. See De, N. K.
- Sunde, C. J. See Lauer, W. M.
- Sundelin, F., lymphocytopenia and fever, III, 812.
- Sunder-Plassmann, P. See Eickhoff, W.
- Sunderland, S., production of cortical lesions by devascularisation of cortical areas, III, 247.
- See also Clark, W. E. Le G.
- Sunderman, F. W., pentosuria, III, 152.
- See also Willson, D. M.
- Sundgren, N. See Tillgren, J.
- Sundman, P. See Ringbom, A.
- Sung, C. See Chu, F. T.
- Suntzeff, V. See Loeb, L.
- Suntzov, P. I. See Petrov, A. D.
- Suoja, K. See Palomaa, M. H.
- Suolahti, O., influence of an electric current on plasma-permeability of plant cells, III, 515.
- Suomalainen, H. See Virtanen, A. I.
- Suomalainen, P., magnesium and calcium metabolism of hibernating hedgehogs; production of artificial hibernation, III, 175. Production of artificial hibernation [by magnesium and insulin], III, 379. Magnesium and calcium content of human serum during diurnal sleep, III, 555. Vitamin-A and carotene in the hen's egg during hatching, III, 1068.
- Suominen, E. E., structure of barbatolic acid, II, 549.
- Supniewski, J. V., pharmacological action of dibenzanthracene, III, 281.
- and Hano, 9:10-di-n-propyl-1:2:5:6-dibenzo-9:10-dihydroanthraquinone, a synthetic oestrogenic substance for mammals, III, 264. Oestrogenic action of anol, III, 264. Influence of Weil's spirochate on chemical composition of the medium, III, 332.
- and Serafinówna, M., synthesis of compounds exciting parasymphathetic nerves; methyl-N-methylisonicotinate and its tetra- and hexahydro-derivatives, II, 35. Pharmacological properties of gramine, III, 412.
- Suppe, F., coherence of the circular components in the Stark effect, I, 439. Extinguishing and depolarisation of mercury fluorescence by hydrogen and deuterium, I, 502. Polarisation of fluorescence of molecules in the vapour and in solution, I, 550.
- Supplee, G. C., and Bender, R. C. [with Babcock, L. C.], determination of vitamin-B₃, III, 164.
- Bender, R. C., and Jensen, O. G., determination of riboflavin; fluorometric and biological methods, III, 993.
- Suprunovitch, I. B., synthesis of dinaphthylthiocarbazone, and formation of its intra-complex salts with heavy metals, II, 58.
- Surdin, M., fluctuation of thermionic current and the "flicker" effect, I, 291.
- Sure, B., influence of avitaminoses on weights of endocrine glands, III, 73.
- Buchanan, K. S., and Thatcher, H. S., vitamin-A and carcinogenesis, III, 159.
- and Dewitt, J. B., oxygen uptake of tissues in vitamin deficiencies, III, 73.
- and Theis, R. M., influence of hyperthyroidism on vitamin-C content of various endocrines and tissues, III, 679.
- Theis, R. M., and Harrelson, R. T., vitamin interrelationships. I. Effect of avitaminosis on ascorbic acid content of various tissues and endocrines, III, 852.
- Theis, R. M., Harrelson, R. T., and Farber, L., influence of Walker carcinosarcoma on concentration of ascorbic acid in various endocrines and organs [in rats], III, 848.
- See also Thatcher, H. S.
- Sureau, M., measurement of chronaxie of guinea-pig uterus, III, 980.
- Surmin, P. P., influence of ketones on the Cannizzaro-Tischtschenko reaction, II, 244.
- Surugue, J., γ -radiation of radio-actinium, I, 52.
- See also Choong, S. P.
- Susic, Z. See Niketic, B.
- Suskind, F. H. See Grace, A. W.
- Suslina, K. D. See Zdanovski, A. B.
- Sussman, S. See Milas, N. A.
- Sussner, H., occurrence of a lipase hydrolysing tributyrin in cerebrospinal fluid, III, 32.
- Susuki, S. See Iwata, M., and Ugami, S.
- Susz, B., and Briner, E., absorption of violet and near ultra-violet radiation by benzaldehyde, I, 178.
- Suter, C. M., Lawson, E. J., and Smith, P. G., synthesis and germicidal properties of 4-fluoro-2-alkylphenols, II, 109.
- and Smith, P. G., synthesis of 4- and 5-phenylresorcinols; "positivo" bromine of the dibromodiphenyls, II, 109.
- and Weston, A. W., synthesis and bactericidal properties of 5-n-alkylresorcinols, II, 153. Esters of 3:5-dihydroxybenzoic acid, II, 159. Preparation of 5-fluoroacetylsalicylic acid, II, 505.
- See also Higgins, R. W., and Weston, A. W.
- Sutherland, A. J. See McFarlane, W. D.
- Sutherland, E. G. See Gayler, M. L. V.
- Sutherland, G. B. B. M., relation between the force constant, the internuclear distance, and dissociation energy of a diatomic linkage, I, 129.
- See also Conn, G. K. T., Davies, M. M., and Lee, E.
- Sutherland, G. L., Daroga, R. P., and Pollard, A. G., colorimetric silicomolybdic acid method for determining small quantities of nicotine, II, 566.
- Sutherland, H. See Shriner, R. L.
- Sutherland, J. K. See Kellar, R. J.
- Sutherland, L. H., and Aston, J. G., rate of the haloform reaction; effect of the nature of the halogens, I, 205.
- Sutherland, M., and Zwarenstein, H., diagnosis of pregnancy by means of human pregnancy blood, III, 1055.
- Sutherland, M. E., agranulocytosis after M. & B. 693, III, 774.
- Sutherland, M. L., and James, N., accuracy of the plate count of suspensions of pure cultures of bacteria in steril soil, III, 105.
- See also James, N.

- Sutherland, M. M. J. See Glen, W. L.
- Sutro, C. J., and Jacobson, S. A., histologic study of reparation of experimentally produced defects in calvariums of rats, III, 1021.
- Sutter, K. See Krupski, A.
- Sutter, M., Meystre, C., and Reichstein, T., constituents of the adrenal cortex and related substances. XXIII. Partial synthesis of substance J, II, 317.
- See also Reichstein, T.
- Sutton, L. E. See Coop, I. E., Davidson, N. R., Hammick, D. L., and Lister, M. W.
- Sutton, T. S., and Brief, B. J., physiological changes in anterior hypophysis of vitamin-A-deficient rats, III, 973.
- Suvorovskaja, N. A. See Plaksin, I. N.
- Suzue, K., Okita, M., and Saito, M., tumour and growth substance, III, 990.
- Suzuki, C., classification of tubercle bacilli by agglutination, III, 207.
- Suzuki, K., Paccinian corpuscles in a Fallopian tube, III, 827.
- Suzuki, M. See Ochiai, E.
- Suzuki, Masami, biochemistry of carbohydrates. XL. Preparation of mucotin from umbilical cord. XLVI. Mucin from umbilical cord. XLVII. Polysaccharides from umbilical cord, III, 394, 1062.
- Suzuki, S., homoioplastic skin transplantation, III, 643.
- Suzuki, Shintaro. See Kunimine, S.
- Suzuki, Shozaburo. See Takase, T.
- Suzuki, T., and Mayeda, Y., shape of medulla oblongata of Japanese, III, 829.
- Suzuki, Tamotsu, peroxidase-positive erythrocytes and normoblasts in human blood; close relation between peroxidase and haemoglobin, III, 548. Significance of crystal-like needles in leucocytes with positive Sato-Sekiya copper peroxidase reaction, III, 548. Short-time peroxidase reaction of blood polynuclears of rice-diseased (B_2 -avitaminous) mice, III, 647.
- and Shiraishi, S., comparison of short-timed peroxidase reaction between Sato and Sekiya's original method and Tohoku pediatric method, III, 548.
- Suzuki, Y. See Yaoi, H.
- Svartholm, N., wave-mechanical problem of two centres, I, 117.
- Švec, F., absorption of *g*-strophanthin from intestine, III, 613.
- Svedberg, T., results of ultracentrifuging and diffusion for protein chemistry, I, 76. Protein molecule, III, 785.
- and Brohult, S., splitting of the haemocyanin molecule by ultra-violet light, III, 194. Splitting of protein molecules by ultra-violet light and α -rays, III, 868.
- See also Boestad, G., and Gralén, N.
- Svendsen, I. See Dam, H.
- Svenmar, M. See Gjerdt, A.
- Svensson, H., direct photographing of electrophoresis diagrams, I, 370.
- Sveschnikov, B. J., mechanism of chemiluminescence of 3-aminophthalhydrazide. I, I, 126.
- Sveschnikova, N. A. See Parschin, A. N.
- Sviderskaja, T. A. See Musheev, V. A.
- Svigoon, A. C. See Gilman, H.
- Svirbely, W. J., directive influence of the electric moment on substitution in the benzene ring, I, 551.
- Swain, G. See Spring, F. S.
- Swalm, W. A., evaluation of methods for gastric analysis, III, 146.
- Swaminath, C. S. See Shortt, H. E.
- Swaminathan, M., value of the proteins of food-stuffs in nutrition. V. Supplementary values of proteins of *Eleusine coracana* (ragi) pulses and skimmed milk powder. VI. General conclusions, III, 161. Chemical determination of nicotinic acid in biological materials, III, 288.
- Swangard, W. W., protein content of horse serum; effect of surgical operation on content, chief constituents of the protein, and on polypeptides and residual nitrogen, III, 961.
- Swann, H. G., recovery in the rat from diabetes insipidus caused by post-hypophysectomy, III, 259. Salt and water metabolism in diabetes insipidus, III, 974. Hyperthyroid splachnometegaly after hypophysectomy, III, 1048.
- and Johnson, P. E., thyroid function in diabetes insipidus in the rat, III, 475.
- and Penner, B. J., effect of salts on diabetes insipidus following post-hypophysectomy in the rat, III, 578.
- Swann, S., jun., and Lucker, G. D., electrolytic reduction of benzoic acid to benzyl alcohol, II, 210.
- Swann, W. F. G., effect of galactic rotation on intensity of cosmic radiation, I, 6. What are cosmic-rays? I, 116. Theory of effect of earth's magnetic field on cosmic rays, I, 116.
- and Danforth, W. E., Geiger-counter measurements of the vertical cosmic-ray intensity between sea level and 24,000 ft., I, 444.
- and Ramsey, W. E., showers produced by penetrating rays, I, 547.
- Swanson, D. See Grabfield, G. P.
- Swanson, D. C. See Bacher, R. F.
- Swanson, H. S. See Goodpasture, E. W.
- Swanson, L. W. See Greene, J. A.
- Swanson, T. B. See Berry, P. A., and Gillespie, D. T. C.
- Swartelé, A. A., growth-[promoting] substances, III, 437.
- Swartout, J. A., and Dole, M., protium-deuterium ratio and at. wt. of hydrogen, I, 545.
- Swarts, F., trifluoroacetates, I, 482.
- Swartz, S. See Kharasch, M. S.
- Swaryczewski, A., conoscopic determination of the position of the binormals in a triclinic crystal, without knowledge of the n_D index, I, 537.
- Sweany, H. C., and Klaas, R., X-ray diffraction analysis as applied in pneumoconiosis, III, 621.
- Klaas, R., and Clark, G. L., detection of crystalline silica in lung tissue by X-ray diffraction analysis, III, 95.
- Swedin, B. See Theorell, H.
- Sweeney, A. R., jun. See Nathanson, I. T.
- Sweeney, H. M. See Mayerson, H. S.
- Swenson, P. See Barach, A. L.
- Swenson, T., and Ricci, J. E., ternary systems $\text{KBrO}_3\text{-KClO}_3\text{-H}_2\text{O}$ at 25° and $\text{NaBrO}_3\text{-NaClO}_3\text{-H}_2\text{O}$ at 25° and 50°, I, 524.
- Svensson, A., anterior spinal root fibre diameter in man, III, 466.
- See also Dahlstrom, G.
- Sweny, J. W. See Hildebrand, J. H.
- Swiatkowski, H. See Lieser, T.
- Swiderek, M., dependence of absorbent power of charcoal on duration of contact with the filtering layer, I, 254.
- Swiderski, J., tetracinnamoylthane, II, 215.
- Swientoslawski, W., nature of pre-critical state, I, 191. Critical, pre-critical, and post-critical phenomena, I, 515.
- Swift, E., jun., conductance of dilute solutions of alkali iodides in dimethylamine, I, 28. Densities of deuterium oxide-water mixtures at 5° and 25°, I, 136. Entropy of ionisation in solutions of low dielectric constant, I, 324. Temperature of maximum density of D_2O and of its mixtures with H_2O , I, 363. Apparatus for holding funnels while filtering into beakers, I, 434.
- See also Loftfield, R. B.
- Swift, S. R. See McGookin, A.
- Swineford, O., jun., intrapulmonary inhalation of benzedrine, III, 84.
- Swingle, W. W., Parkins, W. M., Taylor, A. R., and Hays, H. W., circulatory failure and shock following trauma to the healthy, vigorous adrenalectomised dog, III, 139. Circulatory failure of adrenal insufficiency and analogous shock-like conditions, III, 261.
- See also Parkins, W. M.
- Swings, P., and Dor, L., integration of the equation of radiative transfer [in formation of absorption lines], I, 176.
- and Edlén, B., Fe III lines in stellar spectra, I, 167.
- and Nicolet, M., intensity distribution in the bands of cometary spectra, I, 1.
- Swinyard, C. A., volumetric determination of fresh endocrine glands, III, 1022.
- Swirles, B. See Hartree, D. R.
- Swisher, M. C., and Hummel, F. F., recovery of platinum used in the determination of potash, I, 277.
- Swislowsky, J. See Gilman, H.
- Switzer, G., crystallography of braunite from Nagpur, India, I, 109. Paragenesis of the Center Stratford, New Hampshire, pegmatite, I, 164.
- See also Larsen, E. S.
- Swyer, R. See Harries, E. H. R.
- Swyngedauw, J., interpretation of an experiment of Chanoz and Ponthus on electrolysis of dichromated gelatin, I, 29. Mechanism of electro-osmosis in gelatin, I, 198. Mechanism of electro-osmosis in gelatin gels, I, 260. Role of ionic hydration in electro-osmosis of isoelectric gelatin gels, I, 260. Electro-osmosis in gelatin as a function of the concentration of the gel and the nature of the combined ion, I, 321. Electro-osmosis in gelatin gels before and after treatment with formaldehyde, I, 370.
- Sydenstricker, V. P. See Cleckley, H. M., and Schmidt, H. L., jun.
- Sykes, C. See Jones, F. W., and Leech, P.
- Sykora, V. See Hovorka, V.
- Sykowski, P. See Martin, S. J.
- Sylla, A., importance of allergy in endocrine arthritis, III, 92. Lowered basal metabolism in disease of the right heart, III, 359. Professional diseases of the respiratory organs, III, 419. Action of [sex] hormones on allergic reactions, III, 583. Gold treatment of tuberculosis and chronic rheumatism, III, 779.
- Sylvén, B., occurrence of metachromasia in growing tissue, and its significance, III, 2.
- Sylvester, C. B., and Durham, O. C., rag-weed-pollen survey in Maine for 1937, III, 418.

- Sym, E. A., hydrolase activity of contents of the caecum in horses and of the rumen of cattle, III, 198.
- Stankiewicz, W., and Zielinski, F., hydrolase activity of contents of the caecum in horses and of the rumen of cattle, III, 723.
- See also Przylecki, S. J. von.
- Symanski, industrial vanadium poisoning, its development and symptomatology, III, 1092.
- Symeonidis, A., homoioplastic transplantation of liver into mice previously injected with liver tissue emulsions; transplantation immunity, III, 271.
- and Linzbach, A. J., fibro-elastic "hamartia" of the myocardium (so-called heart fibromata), III, 345.
- Symons, P. H., erythrocyte, hemoglobin, and iron content of blood of normal subjects at Witwatersrand (altitude 6000 ft.), III, 958.
- Synerholm, M. See Noller, C. R.
- Synge, R. L. M., Hofmann degradation of glutamine residues in gliadin, II, 302.
- Syverson, J. T. See Morrow, G.
- Szabó, F. See Gerö, L.
- Szabo, J. L. See Lange, N. A.
- Szabó, M. R. See Jendrassik, L.
- Szabó, Z., entropy of electrolyte solutions, I, 473.
- Szalay, A., excitation functions of the transformations: $^{27}\text{Al}(\alpha; n)^{30}\text{P}$ and $^{10}\text{B}(\alpha; n)^{13}\text{N}$, I, 295.
- Szamborska, W. See Żeromski, S.
- Szamek, G., titrimetric determination of magnesium, I, 278.
- Szántó, G. See Balassa, G.
- Szantroch, Z., significance of multinuclear nerve cells in the sympathetic ganglia,
- Szarski, H., corpus lymphaticum subdermale in the frogs: *Rana esculenta*, *R. temporaria*, and *R. terrestris*, III, 15.
- Blood vessels of thymus gland in the *Urodela*, III, 541.
- Szarvas, P., electrochemical behaviour of mercury in solutions containing foreign ions, I, 474.
- Szczecinski, M. See Lumière, A.
- Szczeniowski, S., and Ziemecki, S., residual currents and deep-water measurements of cosmic rays, I, 54.
- Szczygiel, A., effect of infra-red radiation on growth of vitamin-deficient rats, III, 194.
- Szabellédy, L., and Ajtai, M., determination of vanadium by activated catalysis, I, 219. Activation with potassium hydrogen tartrate of the catalytic reaction of vanadium, I, 220. Activation of the catalytic action of vanadium with pyrocatechol, I, 220. Activation of the catalytic reactions of vanadium with 8-hydroxyquinoline, I, 220.
- and Madis, W., bromatometric determination of thiocyanate, I, 38. Bromatometric determination of calcium, I, 39. Bromatometric determination of oxalate, II, 43. Bromatometric determination of thiocarbamide, II, 43.
- and Vezzián, B., reductometric determination of gold with arsenious acid, I, 102.
- Szedrowicz, J. See Centnerszwer, M.
- Széki, T., sharp-tasting acylamines, II, 447.
- Szelőczy, J., mechanism of the histamine effect, III, 506.
- and Horváth, J., fibrillary contractions produced by eserine, III, 464.
- Szendi, B., action of anterior pituitary hormone on infantile uterus in mice, III, 972.
- Szenies, T. See Korányi, A.
- Szent-Györgyi, A., therapeutic properties of the vitamins, III, 163. Cell respiration, III, 405. Biological oxidations, III, 606.
- Bacq, Z. M., and Goffart, M., humoral transmission of muscular contraction in presence of veratrine, III, 663.
- See also Banga, I.
- Szenhe, L. von, lymphatic vessels and lymph nodes of the mouth, III, 111.
- Szép, E., and Cielelszky, W., simplified apparatus for determination of traces of arsenic alone and in presence of antimony, I, 277.
- See also Bodnár, J.
- Szepesi, Z. See Bay, Z.
- Szepsenwol, J., transplants of eyes in adult fishes; effect on chromatophores, III, 472. Heterotopic transplants of optic and olfactory vesicles in axolotl larvae, III, 543. Heterotopic transplant of forebrain vesicle in amphibian larvae, III, 543. Silver impregnation of sections, III, 545. Differentiation of spinal ganglion cells in tissue cultures, III, 901.
- Szilard, L., and Zinn, W. H., instantaneous emission of fast neutrons in the interaction of slow neutrons with uranium, I, 294.
- See also Anderson, H. L., Goldhaber, M., and Zinn, W. H.
- Szilvinyi, A. von. See Janke, A.
- Szily, M. von. See Schulek, E.
- Szper, J., and Szper, S., dextrin and starch sols charged with phosphoric, sulphuric, and organic acid groups, I, 369.
- See also Pauli, W.
- Szper, S. See Pauli, W., and Szper, J.
- Szperl, L., action of sulphur on organic compounds. XIII, II, 290.
- and Rakowski, L., action of benzamide and acetamide on dibenzoyl disulphide, II, 505.
- Szpunar, J. See Fegler, J.
- Sztabyb, R. See Chrzaszczewska, A.
- Sztrókay, K., petrographic studies on the ash of the Quizapu volcano (Chile), I, 109.
- Szulo, M. See Juraszyska, H.
- T.
- Ta, Y., effect of radiations on pyroelectric crystals; possibility of their utilisation as detectors of infra-red radiations, I, 65. Infra-red absorption spectra of the xylidines and the phenomenon of steric hindrance, I, 450.
- See also Freymann, (Mme.) M.
- Ta-Yuan, L. See Lu, S. S.
- Tabakov, N. D. See Godshello, M. G.
- Tabencka, Z. See Hans, M.
- Tabone, J. See Sandor, G.
- Taboury, F. J., polarographic study with inert polished electrodes; analogy between the structure of a Beilby surface and the surface of liquid mercury, I, 267.
- See also Taboury, M. F.
- Taboury, M. F., and Gray, E., zinc corrosion. I. Action of distilled water on zinc. II. Action of distilled water on zinc in presence of air containing various amounts of carbon dioxide, I, 210.
- and Taboury, F. J., thermometers for projection and direct reading of various sensitivities down to 0.02°, I, 388.
- Taboury, M. F., and Viau, O. C., effect of fixation of selenium by Cruciferae on quantitative relationships between certain elements in these plants, III, 948.
- Tachi, I., electrolytic reduction potentials of organic compounds. XXVII. Standard electrolytic reduction potential- pH curve. XXVII. Furfuraldehyde, I, 29, 84.
- Tadokoro, T., Sasaki, Y., and Takasugi, N., chemical properties of acetyl-lactoflavin. I, III, 428.
- and Takasugi, N., proteins of the acetic acid bacteria, III, 102.
- Taebel, W. A. See Kleinberg, J.
- Taufel, K., Thaler, H., and Widmann, G., occurrence and determination of squalene in vegetable and animal fats, III, 536.
- Taffel, M., and Harvey, S. C., effect of sulphur-amino-acid deficiency on wound healing, III, 1066.
- See also Burr, H. S.
- Taft, A. E., intercellular substance of the cerebral cortex (Nissl's cerebral grey matter), III, 246. Effect of solutions of salts normally present in the body on imbibition of water by brain tissue *in vitro*, III, 251.
- Taft, E. See Rubovits, W. H.
- Taft, R., and Malm, L. E., photographic method for determining small differences in specific volume, I, 78. Electrical conductance of sols and gels and its bearing on problem of gel structure. I. Gelatin, I, 320.
- Tagliariello, P., lipolytic activity *in vitro* of the alcoholic extract of urine in cancer, III, 280.
- Tainter, M. L., Whitsell, L. J., and Dille, J. M., analeptic potency of sympathomimetic amines, III, 1087.
- See also Borley, W. E., Crismon, J. M., and Gagliani, J. V.
- Taka, K. See Kobayashi, Y.
- Takacs, W. S. See Toomey, J. A.
- Takada, T. See Atsuki, K.
- Takada, Tomio. See Kanamaru, K.
- Takagi, K. See Fujimaki, Y.
- Takahara, S., circulation of the inner ear, III, 38.
- Takahashi, E., and Masuda, Y., fatty oils of smoked fish. II. Feeding experiments with smoked-herring oils, III, 71.
- and Shirahama, K., fats of sea algae. III. Fat of *Turbinaria fusiformis*, III, 1019.
- Takahashi, Hatuo, substance in urine accelerating hepatic function. I. Adsorption analysis of urine. II. Reducing ability of effective substance. III. Relation between substance and urochrome. IV. Adsorption of effective substance. V. Origin of substance. VI. Effects of tryptophan and its derivatives, III, 1059.
- See also Oshima, M.
- Takahashi, Hiraku, Nakaya, S., Takahashi, Tomio, and Kato, Y., relation between minimal dose of digitalis causing increase of amplitude of the cardiac beat and stopping of the heart and age of the preparation, III, 777.
- Takahashi, Kumao. See Kim, C. H.
- Takahashi, Kyutaro. See Hatakeyama, T., and Yamasaki, K.
- Takahashi, T., the epithelium of the human ureter, III, 444.
- Takahashi, Teizo, and Yokoyama, Y., constituents of extract of bamboo sprouts, III, 638.
- Takahashi, Tomio. See Takahashi, Hiraku.

- Takabashi, *Torizo*, constitution of crystal-line constituent of the bark and leaves of *Abies mariesii*, Mast. I, II, 438.
- Takahashi, *Y.* See Nakamura, *K.*
- Takai, *T.* See Arii, *K.*
- Takai, *T.* See Ogata, *D.*
- Takamatsu, *A.*, glyoxalase content in human milk and Arakawa's reaction, III, 395.
- Takamine, *T.*, Suga, *T.*, Tanaka, *Y.*, and Imotani, *G.*, continuous emission spectrum accompanying the resonance lines of neon, I, 347.
- Takase, *T.*, and Suzuki, *Shozaburo*, influence of sex and season on action of papaverine and *N*-methylpapaverine on frogs, III, 617.
- Takasima, *R.*, Wake, *S.*, and Komisiike, *M.*, early development of lung in amphibia, especially in *Hynobius nebulosus*, III, 888.
- Takasugi, *N.* See Tadokoro, *T.*
- Takáts, *T.*, granodiorite from Zsidovar, I, 496.
- Takebayashi, *M.*, sorption of gases on reduced nickel. I. Hydrogen, oxygen, and hydrogen bromide. II. Sorption of gaseous hydrogen bromide and hydrogen chloride and sorption of hydrogen bromide through a liquid medium, I, 253, 519.
- Takeda, *E.*, influence of muscular exercise on blood-sugar and other changes, blood-fat, residual nitrogen of blood, and carbon dioxide-combining capacity of blood plasma, of animals kept on different diets, III, 299.
- Takeda, *K.*, glycyrrhetic acid, II, 436.
- Takeda, *S.* See Ikeda, *T.*
- Takeda, *Y.*, and Ohta, *Y.*, loprotenes, a carotenoid of the formula $C_{40}H_{54}$, II, 206.
- Takehara, *H.*, action of arginase in the organism. I. Nutrition and liver-, kidney-, and spleen-arginase. II. Effect of poisons on liver-, kidney-, and spleen-arginase. III. Blood-arginase, III, 196, 357. Composition of nitrogenous constituents of the wall of the caecum of rabbits and dogs, III, 388.
- Takei, *S.*, and Ono, *M.*, leaf-alcohol. III. Odorous principle of cucumber (*Cucumis sativus*, L.), III, 536.
- Sakato, *Y.*, and Ono, *M.*, odoriferous principle of green tea. XI. Primary alcohols from the oil of black tea, III, 439.
- Takeuchi, *H.* See Ishikawa, *S.*
- Takeuchi, *M.* See Nishina, *Y.*
- Takeuchi, *S.*, chemical constitution and pharmacological action of convulsant drugs, III, 89. Effect of adrenaline, choline, and histamine on blood pressure of rabbits with and without ductless glands, III, 1051.
- Takewaki, *K.*, effect of ovarian androgen on mouse adrenal, III, 1057.
- Takino, *M.*, Okatani, *M.*, and Okada, *S.*, valves of pulmonary veins. I. Calf. II. Man, III, 955.
- Takita, *J.*, production of a strong toxin of the Shiga dysentery bacillus by bouillon cultures, III, 794.
- Takizawa, *K.* See Nakamiya, *Z.*
- Talaat, *M.* See Alam, *M.*, and Anrep, *G. V.*
- Talalaeva, *T. V.*, and Kotscheschkov, *K. A.*, reaction of powdered metals or metaloids with lithium phenyl or magnesium phenyl bromide; reaction of lithium with the phenyl compounds of metals of groups II, IV, and V of the periodic system, II, 292.
- See also Pikina, *E. I.*
- Talapatra, *S. K.* See Carberry, *M.*, and Chatterjee, *J.*
- Talbot, *F. B.*, basal metabolism of undernourished girls, III, 1076.
- and Talbot, *N. B.*, disorders of gonad function in children, III, 583.
- Talbot, *N. B.*, influence of thyroid hormone on serum-phosphatase, III, 908. Effect of oestrogen on skeletal age of immature rats, III, 981.
- See also Langstroth, *G. O.*, and Talbot, *F. B.*
- Talbot, *J. H.*, Coombs, *F. S.*, Consolazio, *W. V.*, and Pecora, *L. J.*, respiratory exchange during high carbohydrate ingestion, III, 299.
- Gall, *E. A.*, Consolazio, *W. V.*, and Coombs, *F. S.*, dermatomyositis with scleroderma and calcinosis, III, 606.
- See also Consolazio, *W. V.*
- Talenti, *M.* See Foschini, *A.*
- Taliaferro, *I.* See Ware, *H. H.*
- Talipov, *S.* See Tananaev, *I.*
- Tallmadge, *C. K.*, congenital absence of the gall bladder, III, 150.
- Tallman, *R. C.* See Blanchard, *E. W.*
- Talmud, *D. L.*, structure of protein molecules and their catalytic properties, II, 42.
- "Intraglobular" reaction in protein solutions, II, 397. Structure of the protein molecule, II, 525.
- See also Krasnova, *T. A.*, and Pochil, *P. F.*
- Talpade, *C. R.* See Prasad, *M.*
- Tamai, *M.*, antimony electrode for determination of pH , I, 373.
- Tamaki, *T.*, chromocystoscopy in surgical kidney diseases, III, 596.
- Tamalet, *L. J.* See Sendrail, *M.*
- Tamamushi, *B.*, and Akiyama, *H.*, kinetics of rearrangement of *cis-trans*-isomerides in gaseous state under influence of foreign gases, I, 151. Chemiluminescence of dimethyldiacridylum nitrate, I, 301.
- Akiyama, *H.*, and Umezawa, *S.*, dipole moment and structure of the isomeric selenophthens, I, 598. Parachor, dipole moment, and molecular refraction of selenophen, I, 598.
- Tamamushi, *Y.*, synthesis of 2-ethylglyoxalino derivatives; synthesis of 4:5-diaminomethyl-2-ethylglyoxalino, II, 390.
- Tamara, *M.* See Kozawa, *S.*
- Tamaru, *T.* See Ishida, *Y.*
- Tamesuke, *O.*, and Haziwe, *N.*, indophenol-oxidase reaction in brain of monkeys suffering from "summer encephalitis," III, 248.
- Tamis, *A. B.* See Leiboff, *S. L.*
- Tamiya, *H.*, and Kubo, *Hideo*, non-identity of cytochrome-oxidase and Warburg's respiratory enzyme, III, 98.
- Tamm, *I. B.*, isotope shift of spectral lines and the interaction of neutrons with electrons, I, 172. Isotope shift of spectral lines, I, 393.
- See also Blochinzev, *D. I.*
- Tamsma, *A. F.* See Backer, *H. J.*
- Tamura, *T.*, metabolic products of *Aspergillus ochraceus*. III. Synthesis of iso-ochracin, II, 479.
- Tanabe, *T.*, phagocytosis of leucocytes in leukaemia, III, 4.
- Tanabe, *Y.*, Abderhalden pregnancy test, III, 265. Diagnosis of carcinoma by Abderhalden reaction in urine, III, 598.
- Tanabe, *Yasuhisa*, biochemistry of carbohydrates. XXXVIII. Mucin from sublingual gland. I. XLII.—XLIV. Mucin from sublingual gland. II. III. Third carbohydrate. IV. Physical constants. XLV. Sublingual mucoid and an artificial salivary mucin, III, 156, 987, 1062.
- Tanaka, *Haruo*. See Morita, *N.*
- Tanaka, *Hidekazu*. See Wada, *Masao*.
- Tanaka, *Kazuyosi*. See Nakamura, *H.*
- Tanaka, *Kenzo*, examination of thin rubber films by electron diffraction, I, 130.
- Tanaka, *S.*, addition of oxygen to double linkings, II, 514.
- Tanaka, *Syozo*, fermentation. I, III, 1010.
- Tanaka, *T.* See Ogata, *A.*
- Tanaka, *Y.* See Takamine, *T.*
- Tananaev, *I.*, ternary system AlF_3-HF-H_2O , I, 265.
- and Dshapariidze, *E. S.*, titration curves in the system $Cd^{++} + Rb^+ + Fe(CN)_6^{--}$, I, 262.
- and Talipov, *S.*, use of fluorine compounds in chemical analysis, I, 278. Solubility of double fluorides of aluminium and alkali metals, I, 607.
- Tananaev, *N. A.*, titration of small volumes, I, 44.
- Tanasescu, *I.*, and Iiescu, *I.*, photochemical reactions in the *o*-nitrobenzylidene-acetal series. XII. Mono- and di-*o*-nitrobenzylidenepentaerythritol, tri-*o*-nitrobenzylidenedulcitol, and di-*o*-nitrobenzylidenedonitol, II, 46.
- and Nanu, *I.*, nitrones; condensation of aryl nitroso-compounds with di- and tri-nitroloenes, II, 323.
- and Ramontianu, *E.*, acridones. XII (1). Direct halogenation of substances of the acridone type, II, 282.
- Tandy, *A. W.* See Pugh, *A. E.*
- Taneiti, *Y.* See Wada, *Masao*.
- Tange, *M.*, and Nakahara, *K.*, chromosomes of the ring dove, *Streptopelia risoria*, III, 348.
- Tange, *U.*, vitamin- B_2 complex. III. Growth-promoting factor in liver extract. IV. Effect of carbohydrate on vitamin- B_2 deficiencies, III, 703.
- and Kaneko, *Tetsuko*, vitamin- B_2 complex. II. Nutritive value of sugars, III, 703.
- Taniguchi, *H.* See Kimura, *W.*
- Taniguchi, *T.*, and Kurita, *Y.*, distribution of sweat glands of Japanese twin embryos, III, 442.
- See also Kanamaru, *K.*
- Tankó, *B.* See Bodnar, *J.*
- Tannenbaum, *A.* See Cohn, *D. J.*
- Tannenberg, *J.*, pathological changes in heart, skeletal musculature, and liver in rabbits treated with insulin in shock dosage, III, 681. Symptoms and anatomical changes produced by anoxic and insulin shock, III, 832.
- Tanner, *F. W.*, and Pitner, *G.*, germicidal action of bromine, III, 859.
- See also Clark, *Francis M.*
- Tanner, *H. A.* See Bachman, *G. B.*
- Tanner, *H. G.*, Benning, *A. F.*, and Mathewson, *W. F.*, thermodynamic properties of methyl chloride, I, 410.
- Tanner, *W. F.*, Texas surface soils, I, 588.
- Tansley, *K.* See Bourne, *M. C.*
- Tanzi, *B.*, blood-cholesterol and follicular hormone, III, 13.
- Tao, *H.* See Cheng, *L. T.*
- Tao, *K. Y.* See Sah, *P. P. T.*
- Tapadinhas, *J.* See Jacobsohn, *K. P.*
- Taperoval, *A. A.* See Belopolski, *A. P.*

- Tapfer, S., uterus inhibitory substances in thymus and liver of foetus, III, 913.
- Tappe, W. See Hückel, W.
- Tappermann, F. See Rheinboldt, H.
- Tappert, J. G., experimental investigation of de Broglie's equation, I, 117.
- Taquini, A. C., production of hypertensive substance by the completely ischaemic kidney, III, 239. Production of the renal vasoconstrictor substance in various conditions, III, 560.
See also Fasciolo, J. C.
- Tarachow, S., Korsakoff psychosis in spontaneous subarachnoid haemorrhage, III, 672.
- Taradoire, F., protective arrangement for constant-temperature apparatus heated by electricity, I, 339. Reactions between solids. I. and II., I, 381, 484.
- Taran, A., and Lipstein, S., Takata-Ara reaction in amyloidosis, III, 355.
- Taranov, A. J. See Sineinikov, K. D.
- Tarantino, C. See Borghi, B.
- Taras, J. T. See Blicke, F. F.
- Tarasov, L. P., and Parker, E. R., ferromagnetism in austenite, I, 554.
- Tarbell, D. S., and Weiss, M., action of lithium on an optically active aliphatic chloride, II, 290.
- Tarbutton, G., Egan, E. P., jun., and Frary, S. G., solubility of silicon tetrafluoride in organic solvents; behaviour of such solutions, I, 560.
- Tarlan, M., prostigmine in myasthenia gravis, III, 27.
- Tarlov, I. M., structure of the filum terminale, III, 245.
- Tarnopol, L. See Hultgren, R.
- Tarr, H. L. A., trimethylamine formation in relation to the viable bacterial population of spoiling fish muscle, III, 331.
[with Cochran, W. G.], American foulbrood of bees. II. Germination of the endospores of *Bac. larvæ* in media containing embryonic tissues, III, 629.
- Tarras-Wahlberg, B., presence and appearance of histamine in blood and lungs, III, 311.
- Tartakovsky, P. S., internal photo-electric effect, I, 404.
- Tartar, H. V. See Wright, K. A.
- Tarver, H., and Schmidt, C. L. A., conversion of methionine into cystine; radioactive sulphur, II, 496.
- Tarwater, J. S. See Marshall, W.
- Tasaki, I., electric stimulation and excitatory process in the nerve fibre, III, 664. Strength-duration relation of normal, polarised, and narcotised nerve fibre, III, 665.
- Taschek, R., and Williams, Dudley, infrared transmission of several organic compounds near the m.p., I, 119.
- Tate, F. G. H., and Warren, L. A., dehydration of salt hydrates by entrainment distillation with liquids immiscible with water, I, 566.
- Tate, J. T. See Hustrulid, A., and Kusch, P.
- Tateishi, T. See Maeda, T.
- Tatevosian, G. T. See Kazanski, B. A.
- Tatge, E., crystallisation of the Rockville granite, Minnesota, I, 498.
- Tatibana, M. See Koga, I.
- Tatievskaja, E. P., and Tschufarov, G., effect of carbon dioxide on rate of reduction of magnetite and hematite by carbon monoxide, I, 572.
- Tatum, A. L. See Kuhs, M. L., and Werner, H. W.
- Tatum, E. L., nutritional requirements of *Drosophila melanogaster*, III, 1065.
and Beadle, G. W., development of eye colours in *Drosophila*; properties of the hormones concerned, III, 254.
- Tatum, H. J. See Kozelka, F. L.
- Tauber, E. B., and Clarke, G. E., daily peroral administration of soluble bismuth to experimental animals, III, 90. Treatment of pemphigus with vitamin-D concentrates, III, 1074.
and Goldman, L., hemiatrophia faciei progressiva, III, 1038.
- Tauber, F. W. See Krause, A. C.
- Taubmann, G., action of adrenaline in local anaesthesia, III, 187.
- Taurins, A., pyridinonaphthalones, II, 389. Condensation of diphenic anhydride with methylpyridines and methylquinolines, II, 389.
- Tausch, M., use of drugs in obstetrics, III, 412.
- Taussig, H. See Hermann, S.
- Tauzin, P., ultramicroscope with large frontal distance for the study of aerosols, I, 491.
- Tavares, A., Morais, E., and De Melo, J., effect of cholesterol content of blood on sedimentation rate, III, 959.
- Taveira, M., extraction of gases from blood by the Nicloux-Kohn-Abrest process, III, 816.
- Tawde, N. R., Naik, Y. G., and Desai, V. D., relative infra-red content of solar radiations at Bombay, I, 239.
and Trivedi, S. A., CN and AIO bands in the study of the carbon arc, I, 448.
- Tayau, F., effect of soaps on serum in presence of ether, III, 817. Stability of serum-lipins in ageing serum, III, 817.
See also Machebeuf, M. A.
- Tayerle, M. See Dolejssek, V.
- Taylor, A. C. See Hitchcock, D. I.
- Taylor, A. R. See Parkins, W. M., and Swingle, W. W.
- Taylor, C. F. See Frampton, V. L.
- Taylor, D. S., magnetic properties of myoglobin and ferri-myoglobin, and their bearing on problem of the existence of magnetic interactions in hemoglobin, I, 555.
- Taylor, E. H., and Taylor, H. S., hydrogenation of ethane on cobalt catalysts, I, 207.
- Taylor, F. B., Michael, P., and Barnard, L., abnormalities of calcium metabolism, III, 501.
- Taylor, F. H. L. See Lozner, E. L., Pohle, F. J., and Wilkins, R. W.
- Taylor, G. F., and Day, C. D. M., vitamin-D and mineral deficiencies and dental caries, III, 769.
- Taylor, G. G. See Bates, L. F.
- Taylor, G. L., and Ikin, E. W., blood group tests, III, 649.
- Taylor, H. A., and Burton, M., interpretation of mechanism of a thermal decomposition from photochemical evidence, I, 481. Calculation of bond strength in methane, I, 552. Reaction between methyl radicals, I, 568.
and Hanson, W. E., thermal chlorination of chloroform, I, 476.
and Jahn, F. P., thermal decomposition of azomethane, I, 476.
See also Henkin, H., and Jahn, F. P.
- Taylor, H. C., present status of gynecologic endocrine therapy, III, 265.
- Taylor, H. K., and Alexander, H., silicosis and silicotuberculosis, III, 193.
- Taylor, H. M., and Dyrenforth, L. Y., chilling of the body surfaces, III, 277.
- Taylor, H. S., isotope separation, I, 442.
and Turkevich, J., catalytic ring closure of open-chain hydrocarbons, I, 530.
See also Goldwasser, S., Hirschfelder, J. O., Smith, J. O., jun., and Taylor, E. H.
- Taylor, H. W. Y., and Franke, H. M., buffer-indicator analysis of human viruses and neoplasms, III, 529.
- Taylor, I., causation of paralysis in diphtheria, III, 465.
- Taylor, J. K., and Smith, E. R., reproducibility of silver-silver halide electrodes, I, 373.
- Taylor, L. S. See Singer, G.
- Taylor, L. W. See Lepkovsky, S.
- Taylor, M., nutritive spheres in *Amaba proteus*, Y., III, 725.
- Taylor, M. J. See MacDowell, E. C.
- Taylor, M. M. See Ray, G. B.
- Taylor, N. M. See Newton, J. M.
- Taylor, R. E. See Hurlbut, C. S., jun.
- Taylor, R. G. See Nightingale, D.
- Taylor, S. G., 3rd. See Thompson, W. O.
- Taylor, S. J., and Craigie, E. H., vascularity of the hypophysis of the frog (*Rana pipiens*), III, 541.
- Taylor, T. C. See Fletcher, H. H.
- Taylor, T. I., do the isotopes of an element have identical chemical properties? I, 231.
and Glockler, G., construction and operation of a thermal diffusion column for the separation of isotopes, I, 627.
- Taylor, T. W. J., Callow, N. H., and Francis, C. R. W., metallic derivatives of hydrazones and of the oxime-hydrazones of benzil, II, 163.
and Murray, (Miss) A. R., isomeric change in stilbenes, I, 86.
- Taylor, W. See Bolam, T. R.
- Taylor, William. See Read, D. R.
- Taylor, W. G. A. See Collier, L. J.
- Taylor, W. H. See Chao, S. H., Thornely, P. C., and Waymouth, C.
- Tazaki, H., twin lamellæ of boric acid, I, 244.
- Tchakirian, A. See Gosset, A., and Lagrange, R.
- Tchang, Y. L., calculation of the potential functions and fundamental frequencies of the molecules, $C_2H_2D_y$ ($x + y = 4$), I, 304. Theory of effects of latitude and asymmetry of cosmic radiation. VI. Cones of cosmic rays infinitely near the equator. VII. Trajectories near the equator, I, 445.
- Tchao, O. T. See under Te-Tchao, O.
- Tcherneakofsky, P. See Stora, R.
- Tchibukmakher, N. B. See Shamboorov, D. A.
- Tchijevsky, A. L., treatment of hypertension by negative ionisation of the air, III, 655.
- Tchoubar, B., action of magnesium bromide etherate on 1:2-epoxy-1:4-dimethylcyclohexane, II, 156.
and Sackur, O., action of organo-magnesium compounds on 1-bromocyclohexanecaraldehyde, II, 67. Alkaline dehalogenation of 1-chlorocyclohexyl methyl and phenyl ketone; transformation into 1-substituted cyclohexane-1-carboxylic acids, II, 319.
See also Tiffeneau, M.

- Te-Tchao, O., formation of large ions in gases as a function of the size of the particles in suspension, I, 169.
and Le Boiteux, H., coefficient of absorption of small ions by neutral particles in suspension in air, I, 348.
See also Le Boiteux, H.
- Teague, R. S., melanophore hormone of pituitary and metabolic stimulation, III, 1046.
- Noojin, R. O., and Geiling, E. M. K., hypophysectomized frog (*Rana pipiens*) as a specific test object for melanophore hormone of the pituitary body, III, 258.
- Teal, J. See Chown, B.
- Tebelis, F., artificial changes in the central nervous system due to fixation, III, 29.
- Teblich, W. See Kermack, W. O.
- Tecilazic, F., tetrophan therapy in post-diphtheritic paralyses, III, 83.
- Tedder, J. W., toxic manifestations in skin following sulphanilamide therapy, III, 1083.
- Tedeschi, G., rate of hydrolysis of ethyl acetate in a system of two phases, I, 85.
- Teal, H. M., obstetric aspects of cyanosis, III, 461.
Burke, B. S., and Draper, R., vitamin-C in human pregnancy. I, III, 1072.
and Reid, D. E., occurrence of an anti-diuretic substance in urine of patients with pre-eclampsia and eclampsia, III, 486.
See also Ingalls, T. H.
- Teele, R. P., and Schuhmann, S., potentiometer for measuring voltages of 10 microvolts to an accuracy of 0.01 microvolt, I, 433.
- Teglia, P. See Pierucci, M.
- Tegner, W., gold therapy for arthritis in Europe, III, 616.
- Teichmann, H., action of composite photocathodes, I, 126.
See also Jost, W.
- Teisinger, J., polarographic micro-determination of nitrobenzene in blood, III, 452.
- Teissier, G., variations in composition of crab's blood, III, 357.
See also Lafon, M.
- Teitelman, S. L. See Kirshbaum, J. D.
- Telang, D. M., industrial physiology, III, 315.
- Teller, E. See Franck, J., Halstad, L. R., Herzfeld, K. F., Rice, F. O., Seeger, R. J., Sponer, H., and Wigner, E. P.
- Teller, G. L., plant diastase in evidence as to formation and structure of starch granules, III, 199.
- Teltow, J., absorption spectra of permanganate, chromate, vanadate, and manganate ions in crystals, I, 401.
Absorption spectrum of the dichromate ion at 20° K., I, 508.
- Temime, P. See Weissenbach, R. J.
- Temnikova, T. I., anomalous reactions of α -bromoketones, II, 266.
- Temperley, H. N. V., time effects in the magnetic cooling method, I, 554.
- Templeman, W. G. See Blackman, G. E.
- Templeton, F. See Palmer, W. L.
- Templeton, R. D. See Tweedy, W. R.
- Ten Cate, J., acquired reflexes in dogs after bilateral removal of the occipital cortex, III, 33.
Reflex movements of *Amphioxus*, III, 245.
Wave-like movements in *Amphioxus*, III, 245.
- Teneff, S., experimental lateral nerve implantation, III, 569.
- Teng, C., and Chung, H., phagocytosis of Leishman-Donovan bodies by leukemic blood cells, III, 4.
- Tennenbaum, M. See Mann, P. J. G.
- Tenney, B., jun. See Parker, F., jun.
- Teorell, T., and Stenhagen, E., universal buffer for the p_H zone 2.0 to 12.0, I, 144.
See also Alexander, A. E., Schulman, J. H., and Stenhagen, E.
- Tepper, A. E., individual chick cage for use in poultry nutrition studies, III, 599.
- Terechovko, A. S. See Volkova, M. I.
- Terem, H. N., oxidation of beryllium and of nickel at high temperatures, I, 328.
- Terenin, A., optical methods of study of molecular adsorption, I, 139.
- Vartanian, A. T., and Neporent, B., photo-luminescence and vibrational energy exchange in complex molecules, I, 125.
- Terentiev, A. P., and Gomberg, L. L., action of aromatic diazo-compounds on unsaturated compounds. IV. Aromatic and aromatic-aliphatic hydrocarbons, I, 125.
- Terjesen, S. G., and Sandved, K., influence of ionic strength on protolytic equilibrium and acidity, I, 199.
Potentiometric investigation of organic bases dissolved in propionic acid, I, 199.
Interpretation of potentiometric titration curves in acid solvents, I, 200.
- Terpstra, P., and Weerden, W. J. van, Barker's systematic crystallography, I, 11.
- Terrell, A. W., succinic acid and glucose in pituitary ketonuria, III, 258.
- Terrien, J., use of selenium photo-electric cells for precision photometry, I, 579.
- Terrill, C. E. See Gildow, E. M.
- Terroine, E. F., substances nucleiniques; [purines], III, 172.
Creatine et creatinine, III, 172.
Nitrogen metabolism; physiology of proteins. II. Degradation, synthesis, intermediary metabolism; protein catabolism; characteristics, conditions, general mechanisms, promoting and regulating agents, III, 736.
and Devrient, T., degree of oxidation of waste products of protein catabolism in relation to their importance and origin, III, 406.
- Terroine, T. See Bonnet, R.
- Terry, M. C., artificial concentration of test serums in blood grouping, III, 551.
- Terry, T. L., physiology and anatomy of cornea affecting its pathology, III, 751.
- Tertsch, H., graphical representation of the possibilities of axial combinations, I, 129.
- Teschen, H. See Mamoli, L.
- Tess, R. W. H. See Bradsher, C. K.
- Tessitore, N. J. See Champion, P. K.
- Tessmar, K. See Leuchs, H., and Ohle, H.
- Testino, A., hypercholesterolemia due to photosensitisation, III, 419.
Effect of photosensitisation on blood-cholesterol of animals with blocking of the reticulo-endothelial system, III, 554.
Photosensitisation and granulopoietic activity of the reticulo-endothelial system, III, 816.
- Tetlow, W. E. See Robertson, G. J.
- Tettamanti, A. K. See Zemlén, G.
- Tettamanzi, A., separation of phosphoric from arsenic acid with triethanolamine molybdate, I, 97.
Phosphomolybdates of ethanolamines; triethanolamine phosphotungstate, II, 144.
- Teucher, R., objective spectrophotometric determination of light scattered from clouds, I, 180.
- Teunissen, P., and Gorter, C. J., paramagnetic dispersion, I, 188.
See also Gorter, C. J.
- Teunissen, P. H., ion series in colloid chemistry and biology, III, 194.
See also Lignac, G. O. E.
- Tew, W. P., human sterility, III, 583.
- Thaddeä, S., vitamin-C metabolism and impaired thyroid function, III, 41.
Adrenal cortex and blood pressure regulation, III, 1051.
and Bakalos, D., origin of monocytes, III, 647.
See also Rühl, A.
- Thaler, H. See Tafel, K.
- Thalheimer, E. J., Mezzetti, A., and Gershon-Cohen, J., Cooley's anemia (Mediterranean anemia), III, 547.
- Thalhimer, W., use of convalescent scarlet fever and measles sera in prophylaxis and therapy, III, 430.
Concentration of serum in cellophane bags, III, 1029.
Drying frozen serum in cellophane bags, III, 1029.
See also Cohn, D. J., and Hyland, C. M.
- Thanheiser, G., and Heyes, J., influence of size of sample and dependence of line intensities on excitation conditions on errors in spectrographic analysis, I, 94.
- Thannhauser, S. J., Benotti, J., and Reinsteine, H., animal lipins. XIV. Determination of lecithin, cephalin, and sphingomyelin in body-fluids and tissues; analyses of normal human sera, III, 953.
- Benotti, Walcott, A., and Reinsteine, H., animal lipins. XV. Lecithin, cephalin, and sphingomyelin content of normal human organs, III, 953.
- Setz, P., and Benotti, J., composition of sphingomyelin from stromata of red blood cells, III, 227.
- Thatcher, H. S., Sure, B., and Lee, biochemistry and pathology of avitaminosis. II. Histopathology of deficiency diseases, III, 163.
See also Sure, B.
- Thatcher, W. A., calculated wave functions and energy values for X-ray terms of potassium, I, 548.
- Thauer, R., mechanism of heat regulation, III, 404.
and Peters, G., sensory and motor functions in long-surviving midbrain pigeons, III, 467.
- Thaxton, H. M. See Breit, G., and Monroe, A. M.
- Thayer, S. A., Binkley, S. B., MacCorquodale, D. W., Doisy, E. A., Emmett, A. D., Brown, R. A., and Bird, O. D., vitamin-K potencies of synthetic compounds, III, 996.
- Cheney, L. C., Binkley, S. B., MacCorquodale, D. W., and Doisy, E. A., vitamin-K activity of some quinones, III, 923.
- MacCorquodale, D. W., Binkley, S. B., and Doisy, E. A., isolation of a crystalline compound with vitamin-K activity, III, 77.
- McKee, R. W., Binkley, S. B., MacCorquodale, D. W., and Doisy, E. A., assay of vitamin-K concentrates, III, 960.
Assay of vitamins-K. and -K₂, III, 1029.
See also Binkley, S. B., MacCorquodale, D. W., McKee, R. W., Smith, G. V., and Westerfeld, W. W.

- Theilacker, W., formation of benzoxazoles from o-aminophenols, II, 289.
- and Fauser, K., stereochemistry of halo-enamines. I. Determination of configuration of N-chloroketimines by dipole moments, II, 375.
- and Gessner, E., determination of halogens in organic substances by the method of ter Meulen, II, 94.
- Thies, C. V., significance and nature of the cone of depression in ground-water bodies, I, 284.
- Thies, K. See Enders, C.
- Thies, R. M. See Sure, B.
- Theissing, G., action of bellergal in otological disturbances, III, 1044.
- Thellier, (Mlle.) O., diurnal variation of the electrical conductivity of air and of the number of ions and nuclei of condensation at the observatory of Chambon-la-Forêt, I, 342.
- Themlitz, R. See Blanck, E.
- Théodoresco, (Mlle.) M. See Darmon, E.
- Theorell, H., l-cystine from porphyrin c, II, 287. Constitution of cytochrome c. IV. Production of porphyrin-cysteine compounds, II, 394.
- and Åkesson, A., absorption spectrum of further purified cytochrome c, III, 939.
- and Swedin, B., manganese as activator of dihydroxymaleic acid oxidase, III, 515.
- Therman, P. O., neurophysiology of the retina in the light of chemical methods of modifying its excitability, III, 836. See also Granit, R.
- Theron, (Mlle.) R., effect of small proportions of foreign substances on magnetic properties of platinum, I, 408.
- Thevenet, (Mlle.) S., viscosity of serum-albumin in solutions of different pH , III, 719.
- See also Bontaric, A.
- Thévenot, L. See Arloing, F.
- Thewis, J., submicroscopic structure of dental enamel, III, 695.
- Glock, G. E., and Murray, M. M., chemical and X-ray analysis of dental, mineral, and synthetic apatites, I, 154.
- Thibaud, E. See Reboul, G.
- Thibaud, J., magnetic method of separating electrified particles in an inhomogeneous field (trochoidal orbits), I, 160.
- and Comparat, P., discrete groups of particles emitted during disintegration of nitrogen by fast neutrons, I, 53. Distribution of particles of disintegration of nitrogen under the action of fast neutrons; resonance levels of the ^{15}N nucleus, I, 293.
- and Moussa, A., rupture of uranium nuclei under the action of neutrons, and the resulting liberation of energy, I, 234. Disintegration of uranium under the action of neutrons, and partition of this element, I, 234. Rupture of the uranium nucleus into very light atoms, I, 592.
- Thibault, N. W. See Slawson, C. B.
- Thibault, P. See Hornus, G.
- Thiel, C. C. See Davis, J. G.
- Thiele, E. W., relation between catalytic activity and size of particle, I, 424.
- Thiele, G., effect of adrenaline on blood pressure in new-born dogs, III, 581.
- Thiele, H. See Küchler, L.
- Thiele, W., pathogenesis of essential hypochromic anemia, III, 228. Essential hypochromic anemia in men, III, 350.
- Thiele, W., and Klodwig, U., vitamin-A excretion in urine and reticulo-endothelial system, III, 850.
- and Kühl, Herbert, treatment of essential hypochromic anemia, III, 6.
- and Nemitz, K., vitamin-A excretion in urine, III, 601.
- and Pust, G., gastro-intestinal motility in essential hypochromic anemia, III, 147.
- and Seedorf, S., liver and vitamin-A excretion in the urine, III, 493.
- Thielen, E. van. See Bessemans, A.
- Thielepape, E., and Fulde, A., quinoline series. VI. New synthesis of quinic acid, II, 448.
- Thielert, H. See Pfeiffer, P.
- Thienes, C. H. See Drake, M. E.
- Thierfelder, K. See Schöpf, C.
- Thiery, J. P. See Maignon, P.
- Thiesmeyer, L. R., origin of fibrous gypsum veins in the Lykins and Morrison formations of Colorado, I, 343.
- Thiessen, G. J., and Harrington, E. L., use of twin sources in experimental studies of thermal neutrons, I, 340.
- Thiessen, P., female sterility, III, 380.
- Thiessen, P. A., and Molière, K., influence of absorption on the refraction effect for electron beams. I. Measurement of inner potential of polar tetrahedral surfaces of zinc blende, I, 245.
- and Stüber, C., transformations of organic compounds in the solid state (long-chain compounds). I. Stearic acid, I, 13.
- Thilo, E., structure of magnesium silicates, I, 380. Nature of the most important kinds of chemical linking, I, 406.
- and Demant, B., additive power of metallic compounds of 8-hydroxy-quinoline for hydrogen chloride, II, 341.
- and Rogge, G., silicates. VIII. Thermal transformation of anthophyllite, $Mg_2Si_2O_7(OH)_2$; polymorphism of magnesium metasilicate and mechanism of transformation of anthophyllite and talc on heating, I, 287.
- See also Baumgarten, P.
- Thimann, K. V., absorption of carbon dioxide in photosynthesis, III, 340.
- Auxins and inhibition of plant growth, III, 802.
- and Lane, R. L., after effects of treatment of seed with auxin, III, 1110.
- and Schneider, C. L., differential growth in plant tissues, III, 1110.
- Thingstad, R. See Rasmussen, H.
- Thiodet, J., and Ribère, M., agglutinins of the auto-isoagglutination syndrome, III, 7. Agglutinating power of the donor serum, III, 7.
- Thirollox, P. See Ombrédanne, M.
- Thivolle, L., and Laugier, P., acid-soluble phosphorus in blood; corrections for the volume of the precipitate from trichloroacetic acid deproteinisation, III, 14.
- Thoday, D., and Jones, K. M., acid metabolism and respiration in succulent *Composita*. I. Malic acid and respiration during starvation in *Kleinia articulata*, III, 1017.
- See also Jackson, M. W. P.
- Thode, H. G., and Urey, H. C., concentration of ^{15}N , I, 211.
- See also Freed, S., Roberts, I., and Urey, H. C.
- Thodos, G. See Komarewsky, V. I.
- Thoennes, G. See Luyet, B. J.
- Thois, N. van. See Leblond, C. P.
- Thom, C., and Steinberg, R. A., chemical induction of genetic changes in fungi, III, 942.
- Thomae, E. See Jesser, H.
- Thomae, R., hyperinsulinism, III, 1050.
- Thomas, A. R. See Armstrong, A. R.
- Thomas, A. W., and Cohen, Benjamin, nature of aluminium oxydohydroxide as revealed by their action on hydrogen peroxide, I, 196.
- and Stewart, W. G., nature of titanium oxide hydrosols, I, 257.
- Thomas, B. D. See Clark, A.
- Thomas, B. H. See Clark, N. A., and Eck, J. C.
- Thomas, B. W. See Briggs, L. H.
- Thomas, C. D., and Gingrich, N. S., atomic distribution in the allotropic forms of phosphorus at different temperatures, I, 12.
- Thomas, C. P., Maxwell, James, Rink, E. H., and Joules, H., discussion on massive collapse of the lung as a complication of surgical operations, III, 240.
- Thomas, D., clinical experiences with ipedrin, III, 713.
- Thomas, D. E., Laue patterns by reflected X-rays, I, 491.
- Thomas, F. See Korteweg, R.
- Thomas, G. See Nélis, P.
- Thomas, H., and Ting, L. C., innocuous intravenous infusion, III, 20.
- Thomas, H. C., solubility of mercuric chloride in aqueous solutions of several chlorides, I, 315.
- Thomas, H. E., rosette or little-leaf of fruit trees, III, 215.
- Thomas, H. M., and Southworth, H., renal threshold for glucose, III, 693.
- Thomas, H. R. See Tompkins, C. M.
- Thomas, J., and Schlutz, F. W., pancreatic steatorrhea, III, 1058.
- Thomas, Jacques, porphyrins in biology and pathology. IV. Formation of porphyrin in pathology, III, 69.
- Thomas, J. A., apparatus for automatic sterile perfusion of organs, III, 344. Epithelium in culture and in the living organism, III, 348.
- and Chevrement, M., different activity of three quaternary ammonium salts of the choline group on sensitivity of guinea-pig thymus to X-rays, III, 419. Effect of trimethylethyl-ammonium chloride on sensitivity of cells *in vitro* to the action of X-rays; comparison obtained in tissue-culture and in the animal, III, 419.
- Thomas, J. E., use of the neon glow lamp for elimination of induction make shocks, I, 340.
- Thomas, J. E., jun., and Ramsey, W. E., adaptation of a small cloud chamber to the study of electron showers, I, 399.
- Thomas, J. M., Semrad, E. V., and Schwab, R. M., blood-proteins in delirium tremens, III, 11. Fluid intake in delirium tremens, III, 831.
- Thomas, J. O., De Eds, F., and Eddy, C. W., phenothiazine. VII. Bactericidal properties of urine after oral administration of phenothiazine, III, 83.
- See also De Eds, F.
- Thomas, J. W. See Sinclair, M. W.
- Thomas, L. E., Ingalls, J. K., and Luck, J. M., determination of arginine in presence of other amino-acids by means of the Sakaguchi reaction, II, 464.

- Thomas, L. H., and Whitcomb, S. E., normal modes of oscillation of the long-chain paraffin hydrocarbons, I, 552.
See also Shaffer, W. H.
- Thomas, M., *B. tuberculosis* in milk, III, 631.
- Thomassen, L. See Kirkendall, E.
- Thomassin, R. See Bodroux, D.
- Thomé, K. E., cation effects in concentrated NaCl solution, I, 86.
- Thompson, A. F., jun., and Cromwell, N. H., preparation and properties of aldehydes containing deuterium in the functional group, II, 372.
See also Vincent, J. R.
- Thompson, A. R., and Greenfield, C. R. M., chemotherapy in measles and whooping cough, III, 81.
- Thompson, D. H., growth of the large-mouth black bass, *Huro salmoides*, in Lake Naivasha, Kenya, III, 695.
- Thompson, H. E., jun., and Pommerenke, W. T., electrolyte and nitrogen metabolism in pregnancy, III, 1079.
- Thompson, H. T. See Fieser, L. F., and Kohler, E. P.
- Thompson, H. W., Raman spectrum of thiophosgene, I, 9. Ultra-violet absorption of nitrous acid, I, 177. Infra-red bands and association of hydroxylic compounds, I, 402. Structure of ethylene, I, 402. Infra-red spectrum of methylamine, I, 449. Vibration rotation bands of polyatomic molecules in the photographic infra-red, I, 449. Infra-red band of formic acid at 7525 Å., I, 450. Fluorescence of glyoxal vapour, I, 550.
and Skinner, H. A., infra-red bands of methylamine and the phenomenon of free rotation, I, 59.
- Thompson, J. H., and Corwin, W., experimental anoxemia, III, 462.
- Thompson, J. K. See Crouch, R. L.
- Thompson, J. Lyndon. See Armstrong, A. R.
- Thompson, Julian L., critical analysis for sidereal time variations of cosmic rays on the Pacific, I, 175.
- Thompson, J. M. C. See Robinson, R.
- Thompson, J. W. See Bailey, C. R.
- Thompson, K. W., termination of pregnancy of dogs by gonadotropic antihormone, III, 685.
See also Severinghaus, A. E.
- Thompson, L., and Schulte, T. L., urea-splitting organisms in urine, III, 947.
- Thompson, M. R. See Dunker, M. F. W.
- Thompson, N. See Harries, E. H. R.
- Thompson, P. K. See Thompson, W. O.
- Thompson, R. B., reduction of $\alpha\beta$ -diketones, II, 316.
- Thompson, R. C., genetic relations of colour factors in lettuce, III, 213.
- Thompson, S. A., cardio-pericardial adhesions following use of talc, III, 896.
- Thompson, T. G., and Phifer, L. D., plankton and properties of the surface waters of the Puget Sound region, I, 162.
See also Barnes, C. A., Bremner, R. W., and Igeisrud, I.
- Thompson, T. R. See Caldwell, W. T.
- Thompson, V., and Bodine, J. H., phosphorus distribution in the grasshopper embryo, III, 61.
- Thompson, W. O., and Heckel, N. J., [treatment of] undescended testes, III, 591.
- Thompson, W. O., Heckel, N. J., and Bevan, A. D., influence of anterior pituitary-like principle on external genitalia of young boys, III, 385.
- Thompson, P. K., Taylor, S. G., 3rd, and Dickie, L. P. N., calorogenic potency of free thyroxine by mouth, III, 257.
- Thompson, P. K., Taylor, S. G., 3rd, and Hoffman, W. S., treatment of Addison's disease with adrenal cortex extract, III, 912.
- Thompson, W. P., Comeau, W. J., and White, P. D., treatment of syphilis in prevention of cardiovascular lesions, III, 865.
See also Rousselot, L. M.
- Thompson, W. R. See Hallinan, F. J.
- Thompson, W. S. See Fales, H. A.
- Thoms, H. See Greulich, W. W.
- Thomsen, S., agranulocytosis from neorarsphenamine, III, 414.
and Plum, P., eosinophilic leukaemia, III, 1027.
See also Plum, P.
- Thomson, A. M., Griffith, H. D., Mutch, J. R., and Lubbock, D. M., diet in relation to health; dark-adaptation as index of adequate vitamin-A intake, III, 836.
- Thomson, A. P., treatment of *Brucella abortus* infection with foudadin and prontosil, III, 82.
- Thomson, D. L. See Mortimer, H.
- Thomson, E., history of the study of ore minerals, I, 392.
- Thomson, G., dipole moments and molecular structure of methyl and ethyl carbonates, I, 453.
- Thomson, G. P., and Blackman, M., width of rings formed by electron-diffraction, I, 306.
See also Fertel, G. E. F., Gibbs, D. F., and Michiels, J. L.
- Thomson, J. G., and Stabler, F., lipin-rich granulosa-cell tumour and theca-cell tumours, III, 381.
See also Kellett, C. E.
- Thomson, (Sir) J. J., electronic waves, I, 113.
- Thomson, K. B. See Duffendack, O. S.
- Thomson, K. J., Cohen, M. E., and Hamilton, B. E., circulation in pregnancy, III, 236.
- Hirsheimer, A., Gibson, J. G., and Evans, W. A., blood volume changes in normal pregnant women, III, 9.
See also Cohen, M. E.
- Thomson, M. L. See Jenkins, C. E.
- Thomson, S., effect of injections of serum on haemolytic complement, with particular reference to Bordet's anti-immune body effect, III, 8. Effect of therapeutic injections of horse serum on bactericidal and anticomplementary activity of human serum, III, 434.
- Arnott, W. M., and Matthew, G. D., blood complement in acute glomerulonephritis, III, 1028.
- Thomson, S. C., extrahepatic biliary tract of *Hyrax*, III, 441.
- Thomson, W. See Fraser, A. H. H.
- Thomson, W. A. R., potassium and the T wave of the electrocardiogram, III, 559.
- Thordarson, S., azimuthal intensity distribution of Röntgen retardation radiation in the potential region 60–170 kv., I, 347.
- Thoreau, J., and Verhulst, J., Katanga, atacamite, I, 162.
- Thormann, F. See Steinkopf, W.
- Thorn, G. W., and Eisenberg, H., deoxycorticosterone, III, 911.
- Emerson, K., jun., and Eisenberg, H., oral therapy in adrenal insufficiency; the efficacy of a concentrated adrenal cortical extract preserved in glycerol, III, 44.
- and Engel, L. L., effect of sex hormones on renal excretion of electrolytes, III, 152.
- Engel, L. L., and Eisenberg, H., treatment of adrenal insufficiency by subcutaneous implants of pellets of deoxycorticosterone acetate, III, 580.
- Howard, R. P., and Emerson, K., jun., treatment of Addison's disease with deoxycorticosterone acetate, III, 841.
- Thornberry, H. H., pectase activity of micro-organisms, III, 518.
- Thornely, P. C., and Taylor, W. H., co-ordination of aluminium in andalusite, I, 407.
See also Waymouth, C.
- Thorneycroft, F. J. See Barrow, F.
- Thornhill, R. S., and Evans, U. R., electrochemistry of corrosion of partly immersed zinc, I, 71.
- Thornton, C. D. W. See Olcott, H. S.
- Thornton, J. W., potentiation by eserine of bronchoconstriction, III, 898.
- Thornton, M. J. See Foster, R. C.
- Thornton, R. L. See Corson, D. R.
- Thornton, W. M., jun., tantalum as a material for standards of mass, I, 493.
- Thorp, F., jun., and Deem, A. W., *Suckleya suckleyana*, a poisonous plant, III, 1004.
and Harshfield, G. S., onion poisoning in horses, III, 716.
See also Deem, A. W., and Newsom, I. E.
- Thorpe, F. T., vitamin-C deficiency in acute mental disorder, III, 252.
- Thorpe, R. S. See Price, C. C.
- Thorpe, W. H., olfactory conditioning in a parasitic insect; nature of conditioning process, III, 467.
- Thosar, B. V., fluorescent chromium ion in ruby, I, 9.
- Thosar, V. B. See Mehta, T. N.
- Thouret, W. See Rompe, R.
- Thrupp, T. C., impregnation method for staining starch grains, III, 342.
- Thugutt, S. J., Bolivian pinite from Chacaltaya, I, 500. Solubility of barytes in distilled water, I, 518. Behaviour of mixed colloids at high temperature, I, 521. Colloidal solution of chalcedony, I, 521. Colloidal solution of fluorspar, I, 521.
- Thurel, R., defective movement of the eyelids, III, 466.
- Thuret, J., change of arsenic into arsenious compounds by liver, III, 272.
- Thurston, M., and Blair, J. M., surrounding gaseous medium and the Herschel effect, I, 35.
- Thursz, D., treatment of malignant tumours with intravenous injections of ethyl alcohol, III, 159.
- Thury, G., solubility of gases in mixtures of water with non-electrolytes, I, 194.
- Thut, H. F., relative humidity variations affecting transpiration, III, 1108.
- Thygeson, P., cultivation of trachomatous conjunctival epithelium *in vitro*, III, 673. Cultivation *in vitro* of human conjunctival and corneal epithelium, III, 971.
- Tian, A., and Vian, (Mlle.) S., catalytic preparation of acetone, II, 468.

- Tiba, *M.*, action of nicotine on blood pressure in rabbits, III, 712.
See also Wada, *Masao*.
- Tiber, *E.* See Kostov, *D.*
- Tichomirov, *I. I.* See Spitzin, *V. I.*
- Tichomirov, *V. M.*, standard method of determination of potassium, I, 39.
- Tiede, *E.*, crystallochemical investigations on magnesium oxide and lithium fluoride phosphors, I, 241.
- Tiede, *R.* See Hazlet, *S. E.*
- Tiemeyer, *R.*, relations between true crystal growth and lattice defects, studied by the crystallisation of sodium nitrate from the melt, I, 457.
- Tien, *Y. L.* See Chuang, *C. K.*
- Tietze, *K.*, vegetative and generative ovarian function, III, 684.
- Tiffeneau, *M.*, and Cahen, *R.*, effect of temperature on production of propyl bromide anaesthesia in the gudgeon, III, 87. Effect of body temperature on production of propyl bromide anaesthesia in guinea-pigs, III, 87. Influence of immersion in acid or alkali on anaesthesia in gudgeon, III, 1003. Distribution of propyl bromide in central nervous system and blood of guinea-pigs anaesthetised by propyl bromide, III, 1087.
- and Kuriaki, *P. K.*, isomerisation of β -substituted styrene oxides; effect of degree of unsaturation of the substituent, II, 545.
- and Scherner, *H.*, spontaneous disappearance of inhibitory effect of adrenaline on guinea-pig intestine, III, 754. Mechanism of resistance of smooth muscle fibres to prolonged contact with acetylcholine, III, 776. Effect of acetylcholine on smooth and striated muscle, III, 1002. Effects of continuous injection of adrenaline and acetylcholine after atropine or yohimbine, III, 1052.
- and Tchoubar, *B.*, action of magnesium halide etherates on epoxides, II, 61.
- and Vaissière, *G.*, behaviour of *cis*- and *trans*-isomerides in the dehydration of 1-methylcyclopentane-1:2-diols and dehalogenation of the corresponding halogenohydrins, II, 545.
- Tiffeneau, *R.* See May, *E.*
- Tiggelen, *A. van*, radiochemical decomposition of hydrazine greatly diluted with hydrogen, I, 89.
See also Mund, *W.*
- Tigges, *F.* See Jacobi, *J.*
- Tighe, *T. J. G.* See Jackson, *H., jun.*
- Tikkanen, *P.* See Enkvist, *T.*
- Tilitschev, *M. D.*, kinetics of cracking of hydrocarbons under pressure. I. Cracking of normal paraffin hydrocarbons, I, 375.
- and Schtschitkov, *V. K.*, kinetics of cracking of aromatic hydrocarbons under pressure, I, 85. Cracking of decalin under pressure, I, 615.
- Tilitschenko, *M. N.*, accelerating action of ketones on the Cannizzaro-Tischtschenko reaction. II. Dependence of the accelerating action of ketones on the magnitude of the ketone:CH₂O ratio, II, 49.
- Tilk, *W.*, and Klemm, *W.*, magnetochemical studies. XXXI. Paramagnetism of compounds of hexavalent chromium, molybdenum, tungsten, and uranium, I, 247.
- Tiller, *P. M.* See Katz, *G.*
- Tilley, *C. E.*, status of hornblende in low-grade metamorphic zones of green schists, I, 109. Kyanite-gedrite parageneses, I, 588.
- Tillgren, *J.*, and Sundgren, *N.*, hyperthyroidism and treatment with Lugol's iodine. Va.—Ve., III, 376, 578.
- Timirjazev, *A. K.*, generalisation of fundamental equations of aerodynamics and electrodynamics, I, 242.
- Timmerman, *A. M.* See Reding, *R.*
- Timmermans, *J.*, new mesomorphic state: plastic organic crystals, I, 65.
- De Rooster, *J.*, and Michel, *J.*, spontaneous crystallisation and rate of crystallisation of water and heavy water, I, 189.
- and Gillo, *L.*, purification and criteria of purity of acetone, II, 241.
- Laucker, *T. V.*, and Jaffé, *J.*, freezing of solutions as a method of studying some problems of pure chemistry. XIII. Crystal-liquid equilibria in mixtures containing the antipodes of dichlorosuccinic acid and of lactamide, I, 265.
- Timoffev-Ressovski, *N. W.* See Zimmer, *K. G.*
- Timoshevskaja, *N. M.*, studies in the pyrrole series. I. Synthesis of *N*-alkyl-substituted 2:5-dimethylpyrrole-3(4)-carboxylic acid esters, II, 444.
- Timperley, *W. A.* See Clark, *G. A.*
- Tin, *H.* See Yamafuji, *K.*
- Tinel, *J.*, Ungar, *Georges*, and Parrot, *J. L.*, histamine content of the blood during peptone shock in the dog, III, 184.
- Ting, *L. C.* See Thomas, *H.*
- Ting, *Y. C.* See Feng, *T. P.*
- Tingey, *A. H.*, iron content of the human brain. II., III, 251.
- Tingwaldt, *C.* See Hoffmann, *F.*
- Tinker, *J. M.* See Calcott, *W. S.*, and Spiegler, *L.*
- Tinker, *M. A.* See Arnold, *D. C.*
- Tiollais, *R.*, and Perdreau, *H.*, cacodylates of zinc. III. Properties, I, 322.
- Perdreau, *H.*, and Berthois, *L.*, cacodylates of cadmium, I, 322.
- Tipson, *R. S.*, action of silver salts of organic acids on bromoacetyl sugars; new form of *l*-rhamnose tetra-acetate, II, 494.
- Christman, *C. C.*, and Levene, *P. A.*, structure of the aldobionic acid from flaxseed mucilage, II, 298.
- and Levene, *P. A.*, union of nucleotides in ribonucleic acid, II, 128. Partly methylated hexitols. II. Synthesis of $\alpha\beta\gamma\delta$ -pentamethylidulcitol. III. Synthesis of $\alpha\gamma\delta\epsilon$ -tetramethyl-*l*-rhamnitol, II, 466, 492.
See also Raymond, *A. L.*
- Tipton, *S. R.*, effect of cortin on electrolyte changes in cat muscle during stimulation and recovery, III, 260.
- Tischendorf, *W.* See Kessler, *R.*
- Tischer, *J.*, α -naphthylcarbamate esters of complex aliphatic alcohols and their fission by methylalcoholic potassium hydroxide, II, 137. Carotenoids of fresh-water algae. VI. Carotenoids and colourless accompanying compounds of *Euglena heliorubescens*. VII. Polyene pigments of the blue alga *Aphanizomenon flos-aquae*. II., II, 481; III, 803.
- Tischtschenko, *D. V.*, aliphatic chloro-derivatives. XV. Action of quinoline on polyhalogeno-compounds; dimethylenchloroprene. XVI. Vicinal effect, II, 252, 530.
See also Diakonov, *I.*, and Gutner, *R.*
- Tischtschenko, *V. E.*, and Samsonia, *A. M.*, determination of nitrogen in complex cyanides of heavy metals, I, 384.
- Tisdall, *F. F.*, importance of milk [in human diet], III, 160.
- and Drake, *T. G. H.* [with Herbert, *R.*], utilisation of calcium [by rats], III, 398.
- Drake, *T. G. H.*, and Brown, *Alan*, nicotinic acid in the treatment of acrodynia, III, 288.
- Tiselius, *A.*, electrophoretic measurements on albumin, I, 79.
- and Horsfall, *F. L.*, mixed molecules of haemocyanins from two different species, III, 450.
- and Kabat, *E. A.*, electrophoretic study of immune sera and purified antibody preparations, III, 531.
See also Seibert, *F. S.*
- Tishler, *M.*, and Sampson, *W. L.*, anti-haemorrhagic activity of simple compounds, III, 996.
See also Kohler, *E. P.*
- Tissier, *M.* See Bénard, *H.*
- Tisza, *L.*, superconductivity of liquid helium II and Bose-Einstein statistics, I, 66. Viscosity of liquid helium and Bose-Einstein statistics, I, 135.
- Titani, *T.*, and Goto, *K.*, exchange reaction of oxygen atoms between some inorganic anions and water, I, 91. Interchange reaction of the oxygen atom between inorganic anions and water, I, 328.
See also Koizumi, *M.*, and Morita, *N.*
- Titeca, *J.*, electro-encephalographic study of two cases of hysterical anaesthesia, III, 469.
See also Baonville, *H.*, and Lecouturier, *R.*
- Titov, *A. G.*, new graphite deposit in the region of Krasnaya Polyana in North Caucasus, I, 107.
- Titov, *A. I.*, theory of hydrolysis of amines; hydrolysis of nitroso- and nitro-derivatives of 2:6-diamino- and 2-amino-6-hydroxy-pyridine, II, 280.
- Titov, *A. V.*, effect of temperature on composition of complexes formed by interaction of chlorides in solution, I, 611.
- Tittensor, *E.* See McGookin, *A.*
- Titus, *A. C.*, and Cannon, *M. C.*, volumetric determination of aluminium using sodium citrate, I, 278.
- Titus, *H. W.*, Fritz, *J. C.*, and Kauffman, *W. R.*, egg-yolk colour, III, 599.
See also Byerly, *T. C.*, and Riemen-schneider, *R. W.*
- Tiurina, *A.* See Verner, *A.*
- Tjagunov, *G. A.*, ignition of the electric discharge in gas, I, 228.
- To, *S.* See Sasaki, *Shuiku*.
- Tō, *T.*, fate in the animal body of *N*-substituted amino-acids. III. Fate of *ON*-dimethyltyrosine in the rabbit and dog, II, 487.
- Tobiasen, *E. S.* See Nørgaard, *F.*
- Tobinaga, *S.*, morphology of penis bone, III, 642.
- Toby, *C. G.*, effects of different stimuli on composition of gastric juice, III, 146.

- Tocantins, L. M., and Reimann, H. A., perforating ulcers of feet, with osseous atrophy, III, 955.
- and Stewart, H. L., pathological anatomy of experimental thrombopenic purpura in the dog, III, 649.
- See also Horwitz, M. T.
- Todd, A. R., chemical structure and properties of tocopherol (vitamin-E). I. Chemistry, III, 1074.
- See also Bergel, F., Jacob, (Miss) A., Macrae, T. F., and Work, T. S.
- Todd, A. W. See Todd, T. W.
- Todd, D. See Jones, R. N.
- Todd, E. W., differentiation of two distinct serological varieties of streptolysin, streptolysin-O and streptolysin-S, III, 104. Lethal toxins of hemolytic streptococci and their antibodies, III, 332.
- See also Hewitt, L. F.
- Todd, F. See Bruce, W. F.
- Todd, H., and Stalker, H., neuro-psychiatric aspects of bromide intoxication, III, 414.
- Todd, J. W. See Robson, K.
- Todd, T. W., and Todd, A. W., epiphysal union pattern of the Ungulates with a note on *Sirenia*, III, 737.
- Wharton, R. E., and Todd, A. W., effect of thyroid deficiency on bodily growth and skeletal maturation in the sheep, III, 737.
- Todd, W. R., Chuinard, E. G., and Wood, M. T., blood-calcium and -phosphorus in newborn, III, 1028.
- Myers, J., and West, E. S., metabolism of sorbitol and mannitol, III, 408.
- Vreeland, J., Myers, J., and West, E. S., micro-determination of sugar alcohols, II, 133.
- Töndury, G., development of duodenum, III, 642.
- Toennies, G., sulphoxide of methionine, II, 101.
- and Callan, T. P., methionine. III. Comparison of oxidative reactions of methionine, cysteine, and cystine; determination of methionine by hydrogen peroxide oxidation, II, 490.
- and Kolb, J. J., methionine. I. Interaction of methionine and other amino acids with mercuric chloride. II. *d*-Methionine sulphoxide, II, 11, 302.
- Töpel, T. See Müller, Eugen.
- Toerell, T. See Heideberger, M.
- Török, A. See Babics, A.
- Török, T., flame spectrum analysis, I, 277.
- See also Straub, J.
- Tofaute, W., and Büttinghaus, A., iron corner of the iron-titanium-carbon system, I, 19.
- Toffoli, C., Beer's law and Lambert's law in the photometric examination of coloured solutions, I, 624. Oxidation products of indole, II, 562. Molecular combination of iminomethenyl compounds, II, 562.
- Togasaki, Y. See Hamilton, P. M.
- Togawara, Y., effect of ultra-short waves on enzymes, III, 514.
- Toivonen, N. J., and Hirsjärvi, V. P., reduction of 2:2-dialkylated 1:3-diketones; electrolytic reduction of dimethylmethone [2:2:5:5-tetramethylcyclohexane-1:3-dione], II, 217.
- Tokarski, J., petrographic analysis of "pelitigarten" elements of tuffite from Berestowiec, I, 47.
- and Gawinska, (Mme.) H., microscopic-planimetric analysis of Osnick granite in Wollhynien, I, 48.
- Tokugawa, H., microchemical studies of tumour fat, III, 69.
- Tokuoka, Y., koji amylase. XII. Protective substances for heat-inactivation of α - and β -amylases and maltase, and regeneration of enzymic activity after heat-inactivation, III, 519.
- Tokuya, T., implantation of sarcoma into brain of rabbits, and glycogen content of heart and liver, III, 917.
- Tokuyama, S., influence of phenols on muscular contraction, III, 464.
- Tolansky, S., nuclear spin of iodine. IV. New type of hyperfine structure deviation from the interval rule, I, 290.
- and Forester, G. O., nuclear spin of iodine. III. Further measurements on fine structures in the first spark spectrum, I, 1.
- Tolksdorf, S. See Jensen, Hans.
- Tolle, C. D. See Kline, O. L.
- Tollert, H., viscosity of aqueous solutions of strong electrolytes. IV. Viscosimetric detection of higher-order molecules in aqueous solutions. V. Viscosity of aqueous solutions of cerite earth nitrates as an indication of their basicity, I, 411, 419.
- and D'Ans, J., viscosity of aqueous solutions of strong electrolytes. VI. Viscosity of concentrated aqueous salt solutions containing uni- and bi-valent cations, and the homogeneous equilibrium of reciprocal salt pairs, I, 463.
- Tollman, J. P. See Drummond, D. H.
- Tolman, C., quartz "dykes," I, 586.
- Tolman, R. C., static solution of Einstein's field equations for spheres of fluid, I, 237.
- Tolopka, D. See Piazek, E.
- Tolstaja, M. See Kargin, V.
- Tolstoi, E., and Ravner, J., effect of simultaneous multiple injections of insulin on the blood-sugar, III, 380.
- and Weber, F. C., protamine-zinc-insulin, III, 1050.
- Tolstojatov, V. M., and Riskaltschuk, A. T., mixed magnesium alkoxides and their molecular compounds. IV. Action of ketones on ethereal magnesium butoxyiodide, II, 550.
- Tolstojatova, A. A. See Bork, A.
- Tomagheili, A. A., equilibrium constant and heat of reaction for the system acetic acid, ethyl alcohol, ethyl acetate, water, I, 143.
- Tomaschek, R., application of phosphorescence spectra to investigation of structure of solids and solutions, I, 123.
- Tomaschov, N. D., theory of the electrochemical poly-electrode systems and its application to corrosion problems. II. Potentials of three- and many-electrode systems. III. Many-electrode galvanic systems, I, 422, 525.
- Tomasson, H., blood changes in manic-depressive psychoses, III, 651.
- Tomaszewski, W., and Engel, C., vitamin-A and -C in chicks during avitaminosis-K, III, 996.
- Tombleson, J. B. L., and Campbell, R. M., immediate tellurite test in diphtheria, III, 875.
- Tombonlian, D. H., and Bacher, R. F., measurement of hyperfine structure separations, I, 50.
- Tomiček, F. See Tomiček, O.
- Tomiček, O., analytical applications of oxidation reactions in alkaline media, I, 42.
- and Filipović, P., hypohalogenites in volumetric analysis. III. Hypochlorite and hypobromite, I, 99.
- Tomiček, O., and Tomiček, F., electro-analytical determination of rhenium, I, 578.
- Tomlin, S. A., senility in Abchasian centenarians. VII. Sanitary-demographic study, III, 393.
- Tomisicek, W. J. See Larson, W. D.
- Tomita, M., synthesis of diphenylene dioxide derivatives. XIII. 2:8-Di-(α -hydroxy- γ -piperidinopropyl)diphenylene dioxide. XIV. β -Piperidinoalkyl-diphenylene dioxide, II, 442. Synthesis of thianthren (diphenylene disulphide) derivatives; Friedel-Crafts reaction with thianthren; synthesis of 2:8-di-(α -hydroxy- β -piperidinoethyl)-thianthren, II, 443. Synthesis of hexonethionine derivatives. I. Friedel-Crafts reaction with phenoxthionine; synthesis of 2:8-di-(α -hydroxy- β -piperidinoethyl)phenoxthionine, II, 444.
- and Ikeda, T., phenoxthionine and thianthren derivatives. II. Synthesis of phenoxthionine and thianthren oxido derivatives, II, 444.
- and Satomi, M., synthesis of hydrohydrastinin derivatives, II, 457.
- Satomi, M., and Ikeda, T., synthesis of 6-methoxydiphenyl ether-3:4'-diacetic acid, II, 424.
- and Seiki, Y., stereoisomerides of γ -amino- β -hydroxybutyric acid, II, 495.
- and Watanabe, Hikosuke, [attempted] Ullmann reaction with nitrogenous heterocyclic compounds, II, 447.
- See also Kondo, H.
- Tomita, T., general disposition to experimental carcinogenesis. V. Male sex hormone and production of liver cancer, III, 70.
- Tomkeieff, S. I., classification of igneous rocks, I, 286. Zoned olivines and their petrogenetic significance, I, 286.
- Tomlin, E., potassium tellurite in diagnosis of diphtheria, III, 875.
- Tomlinson, (Miss) M. L., preparation of 2:2'-diamino- and -diacetamido-diphenylamines, and their behaviour on oxidation, II, 108.
- Tomlinson, T. H., oral pathology in monkeys in various experimental dietary deficiencies, III, 600.
- Tomlinson, W. H., corundum in a dyke at Glen Riddle, Pennsylvania, I, 500.
- See also Meier, A. E.
- Tommasini, G. See Corbellini, A.
- Tommaso, G., and Tondo, M., atypical behaviour of the cervical vagus in man, III, 805.
- Tommila, E., and Hinshelwood, C. N., activation energy of organic reactions. IV. Transmission of substituent influences in ester hydrolysis, I, 31.
- Tomoda, Y. See Khouvine, (Mme.) Y.
- Tomoda-Sigeto, biliary excretion of sodium tetraiodophenolphthalein and its intestinal absorption, III, 914.
- Tomonaga, S., and Kobayashi, Minoru, scattering and splitting of photons on the non-linear field theory of Born and Infeld, I, 237.
- Tompkins, C. A. See Winters, M.
- Tompkins, C. M., two mosaic diseases of annual stock, III, 1106. Mosaic disease of radish in California, III, 1106.
- Gardner, M. W., and Thomas, H. R., black ring, a virus disease of cabbage and other crucifers, III, 1015.
- Tompkins, F. C. See Alexander, E. A.

- Tompsett, S. L.**, determination of lead in biological materials, III, 954. Effect of constituents of diet on absorption of lead from alimentary tract, III, 1003.
- and **Anderson, A. E.**, lead poisoning, III, 509.
- and **Chalmers, J. N. M.**, studies in lead metabolism, III, 1080.
- Tompson, R. Y.** See **Foster, L. S.**
- Tomski, H. W.**, and **Waller, L. S.**, deterioration of ferrous sulphate and ascorbic acid solutions, I, 279.
- Tondo, M.** See **Tommaso, G.**
- Tongeren, W. van**, determination of alkali metals by Lawrence Smith's method, I, 385.
- Tongiorgi, V.** See **Cocconi, G.**
- Tonkonogi, I. G.**, and **Turovets, I. M.**, basal metabolism in liver diseases, III, 485.
- Tonks, E. L.** See **Ross, C. W.**
- Tonks, L.**, rate of vaporisation of mercury from an anchored cathode spot, I, 15. Theory of magnetic effects in the plasma of an arc, I, 545.
- Tonnelat, (Mme.) M. A.**, relations between the theory of the photon and theory of the heavy electron, I, 118.
- Tono, M.**, effect of oxidation and reduction on hydrolytic and synthetic action of urease, III, 1009.
- Tonutti, E.**, and **Matzner, K. H.**, histochemical investigations on vitamin-C in experimental pneumonia in guinea-pigs, III, 289.
- and **Wallraff, J.**, action of vitamin-B₁ on mice, III, 702.
- See also **Blotevogel, H.**
- Tooke, G. W.** See **Kerridge, P. M. T.**
- Toole, E.** See **Andreadis, T.**
- Toomey, J. A.**, **Fulton, R. P.**, and **Rea, F. W.**, tryptophan bodies [in cerebrospinal fluid] in tuberculous meningitis, III, 573.
- and **Kimball, E. R., jun.**, [treatment of] meningitis caused by *Streptococcus hemolyticus* [by sulphanilamide], III, 857. Treatment of scarlet fever with specific antitoxin of low protein content, III, 1102.
- and **Takacs, W. S.**, sulphapyridine (dagenan) and experimental poliomyelitis, III, 928. Action of ergosterol and of purified vitamin-D on poliomyelitis virus, III, 1105.
- Tooth, G.**, and **Blackburn, J. M.**, memory disturbances after convulsion treatment, III, 1038.
- Toporescu, E.**, polarisation of galvanic cells, I, 325.
- Topping, L. E.**, predominant micro-organisms in soils. I. Description and classification of the organisms, III, 328.
- Topping, N. H.**, experimental Rocky Mountain spotted fever and endemic typhus treated with prontosil or sulphapyridine, III, 999.
- and **Fraser, H. F.**, mouth lesions associated with dietary deficiencies in monkeys, III, 600.
- Toptschiev, A. V.** See **Schorigin, P. P.**
- Topuria, P. A.** See **Kazakaschvili, G. G.**
- Toral, (Mlle.) M. T.** See **Moles, E.**
- Torda, C.**, choline-esterase activity of embryonic tissues, III, 888.
- and **Martini, E.**, choline-esterase in muscle following section of sympathetic nerves, III, 464.
- See also **Martini, E.**
- Torgaschina, Z. I.** See **Esafov, I. I.**
- Torihata, K.**, serological relations of *B. typhi*, *B. pullorum*, and *B. typhi-gallinarum*, III, 432.
- Toriumi, T.**, and **Hara, R.**, transition point of calcium sulphate in water and concentrated sea-water, I, 27.
- Kawahara, T.**, and **Hara, R.**, calcium sulphate in sea-water. II. Solubilities of calcium sulphate hemihydrate in sea-water at various concentrations at 60–150°, I, 21.
- Toro, N.**, primary sarcomata and melanoblastomata of the liver, III, 70.
- Toropov, N. A.**, crystallo-optical analysis of strontium aluminates, I, 457.
- and **Konovalev, P. F.**, solid solutions of calcium and barium orthosilicates, I, 250.
- Torrance, S.**, electrolytic separation of cobalt from nickel by deposition as cobaltic oxide, I, 219. Micro-electric deposition and determination of arsenic, I, 336.
- Torreilles, J.** See **Tournade, A.**
- Torres, I.** See **Dyckerhoff, H.**
- Torres, O. R.** See **Pierce, W. C.**
- Torrey, T. W.**, absorption of colloidal carbon from body cavity of *Ammocoetes*; structure and function of larval kidneys and blood-forming tissues, III, 807.
- Torrini, G.** See **Ferraro, G.**
- Torti, P.**, properties of bran of *Polygonum fagopyrum*, III, 439. Reactions of the active principle of the smut of *Zea mays*, III, 521.
- Tosatti, E.**, respiratory fibres in anterior column of spinal cord, III, 466. Accessory respiratory tract in anterior columns of spinal cord, III, 666.
- Toszeghy, A.** See **Purjesz, B.**
- Toth, D.** See **Fischer, R.**
- Toth, G.** See **Zechmeister, L.**
- Toth, L. A.** See **Mayer, H. S.**
- Totter, J. R.**, and **Berg, C. P.**, effect of optical isomerism on utilisation of tryptophan, histidine, and lysine for growth in the mouse, III, 406.
- Toupizina, G. M.** See **Lyov, S.**
- Tourky, A. R.**, mechanism of the aggregation of silicic acid from sodium silicate solutions. I. The silicic acid of low mol. wt. stable in acid solution. II. Structural observations, I, 141.
- Tournade, A.**, and **Chardon, G.**, mechanism of rise in blood pressure following fall observed after temporary asphyxia, III, 560. Mechanism of cardiac disturbances caused by injection of fluid into pericardium, III, 895. Compensatory hypertension, III, 896. Continuous intravenous injection of acetylcholine in dog, III, 1002. Vasomotor effects of acetylcholine on denervated kidney, III, 1002. Sensitivity of different organs to acetylcholine, III, 1002.
- and **Curtillet, E.**, reactions of arterio-venous anastomoses, III, 967.
- Raynaud, R.**, and **Chardon, G.**, adrenaline secretion during experimentally induced epilepsy, III, 671. Acetylcholine and shivering, III, 1002.
- Torreilles, J.**, and **Chardon, G.**, adrenaline secretion following evacuation of haemopericardium, III, 377. Secondary hypertension following evacuation of an experimental hæmo- or hydro-pericardium, III, 659. Changes in heart rhythm produced by injecting fluid into pericardium, III, 895.
- Toussaint, S. M.** See **Reiff, F.**
- Touw, J. F.**, and **Kuipers, R. K. W.**, treatment of affections of the joints with prosteglin, III, 143.
- Tovbin, M. V.**, theory of fugacity. I. III. Fugacity and activity of solutions. IV. Thermodynamics of real solutions. V. Velocity of solution, and activity of solutions. VI. Heat of evaporation of solutions. VII. Diffusion coefficient, conductivity, and activity of solutions. VIII. Activity and heat of solvation of dissolved substances, I, 26.
- and **Kozakova**, theory of fugacity. II. Fugacity of real gases, I, 26.
- Toverud, K. U.**, vitamin-C requirements of pregnant and lactating women, III, 495.
- Tow, A.**, anaemia of the new-born, III, 115.
- Tower, S. S.**, reaction of muscle to denervation, III, 242. Persistence of fibrillation in denervated skeletal muscle and its non-occurrence in muscle after tenotomy, III, 826.
- Towndrow, R. P.** See **Partington, J. R.**
- Towne, E. B.** See **Gilman, H.**
- Towne, L. E.** See **Nathanson, I. T.**
- Townend, D. T. A.** See **Hsieh, M. S.**
- Townes, C. H.**, greaseless vacuum valves, I, 105. Apparent anomalous isotopic effect in some bands associated with the Swan bands, I, 595.
- Townsend, A. A.** See **Martin, L. H.**
- Townsend, E.**, acute yellow atrophy of liver after chloroform, III, 1087.
- Townsend, J. S.**, ionisation by collisions of positive ions, I, 395.
- Townsend, S. R.**, single myeloid bone tumour associated with a blood picture of chronic myelocytic leukaemia, III, 813.
- Craig, R. L.**, and **Braunstein, A. L.**, leucocytosis in spinal fluid in cerebral vascular accidents, III, 750.
- Townson, W. K.**, acute arsenical poisoning in fowls, III, 91.
- Toyama, T.** See **Kawamura, R.**
- Toyama, Y.**, re-esterification of stearic acid esters with higher fatty acids and re-esterification of tristearin with triolein, II, 467.
- Tozer, B. T.**, and **Smiles, S.**, rearrangement of aryl salicylates, II, 20. Rearrangement of *o*-carbonyl derivatives of diphenyl ether, II, 65.
- Trabaud, L.** See **Sabetay, S.**
- Trachtenberg, F. I.**, potential of lithium amalgam and activity of lithium ion in isoamyl alcohol, I, 565.
- Traeger, C.** See **Snyder, R. G.**
- Trall, J. G.**, lower carboniferous lime-stones and toad-stones at Mill Close Mine, Derbyshire, I, 585.
- Trainina, F. L.**, effects of chemical stimulants on yeast growth, III, 100.
- Trainina, S. S.** See **Krasilschtschikov, A. I.**
- Trapeznikov, A. A.**, mechanical properties of adsorption layers of insoluble fatty acids and alcohols on water and influence of p_H of the substrate on these properties. II. and III., I, 196, 519.
- See also **Rehbinder, P. A.**
- Trapeznikova, O. N.**, and **Miljutin, G. A.**, specific heat of methane under pressure, I, 602.
- Traub, E.**, epiphyseal necrosis in pituitary gigantism, III, 1046.

- Traub, H. P., growth-substances, with particular reference to sub-tropical fruit plants, III, 802.
See also Dandliker, W. B.
- Traut, E. F., and Logan, C. E., sulphanilamide [in undulant fever and *Strept. viridans* infection], III, 502.
- Trautmann, A., development of lymphatic system in intestinal canal of mammals on vegetarian and meat diet, III, 592.
- Trautmann, S., distribution of ions in ovalbumin solutions, III, 869.
- Trautteur, P., new band in arc spectrum of nitrogen, I, 347.
- Travagli, G., methylene dinitrate, II, 46.
- Travers, M. W., kinetics of hydrocarbon decomposition, I, 326. Pyrolysis of two-carbon and three-carbon paraffin and olefine hydrocarbons. I. Equilibrium mixtures, II, 465.
and Hawkes, J. A., kinetics of thermal decomposition of the methylamines. II, I, 528. Pyrolysis of two-carbon and three-carbon paraffin and olefine hydrocarbons. II. Pure ethane. III. Influence of nitric oxide on the secondary decomposition of ethane, II, 465.
See also Carter, A. G., Gray, T. J., and Silcocks, C. G.
- Traverso, L. G., blood volume in normal, pregnant, and puerperal women, III, 448.
- Travkin, I. S. See Voroshnev, N. N.
- Travnicke, F. K. J. See Wacek, A. von.
- Treadwell, C. R., and Eckstein, H. C., composition of the tissue lipins of the Virginia white-tailed deer (*Odocoileus virginianus borealis*), III, 596.
- Treadwell, W. D., and Cohen, A., equilibrium of magnesium chloride and of carnallite melts with oxygen, I, 371.
Cohen, A., and Zürrer, T., preparation of anhydrous magnesium chloride, I, 380.
and Leutwyler, F., constitution and analysis of polymeric phosphoric acids, I, 79.
- Treffers, H. P. See Heidelberger, M.
- Tréfouël, J., treatment of infectious diseases by chemical remedies; results of antibacterial chemotherapy, III, 775.
- Strickler, H., and Bovet, D., comparative effects of aminoethoxydiphenyl derivatives on the heart, III, 454.
- Tréfouël, (Mme.) J., Nitti, F., Bovet, D., and Hamon, V., relation between rate of reduction of nitrogenous colouring matters and their therapeutic properties, III, 504.
See also Bovet, D., and Nitti, F.
- Tréfouël, (Mme.) J. See Bovet, D., Nitti, F., and Tréfouël, J.
- Treibs, A., constitution of naturally occurring, sensitising dyes, II, 89.
- Treibs, W., oxidation catalysed by pervanadic acid. I. General course of the reaction and primary oxidation products. II. Oxidation and fission of saturated cyclic ketones, II, 95, 376.
- Treiger, I. See Lundy, C. J.
- Trelease, S. F. See Pratt, R.
- Tremblay, J. L., and Bernard, R., physical chemistry of mammalian blood, III, 742.
- Trendelenburg, W., break between voice registers in singing. II. Changes in voice by the action of the natural vocal tube, III, 460.
- Trenkler, F., characteristic vibrations of mechanical molecular models. IV. 4-Membered rings, I, 128.
- Trenknerówna, M., synthesis of hydroxy-derivatives of dicinnamoylmethane, II, 266.
- Trenner, N. R. See Bastedo, W. A.
- Treon, J. See Machle, W.
- Tress, H. J., configuration of chelate rings, I, 62.
- Tressler, D. K. See Kirk, M. M.
- Trethewie, E. R., "free" and "bound" histamine and acetylcholine, III, 180, 411. Synthesis of acetylcholine in brain tissue, III, 252. Comparison of hemolysis and liberation of histamine by two Australian snake venoms, III, 1005.
See also Kellaway, C. H.
- Trevithick, H. P., and Lewis, R. R., fat from locusts, III, 845.
- Trevorrow, V., nature of blood-iodine, III, 555.
- Tria, E., anticatalase, III, 870.
- Triendl, E., action of caffeine and caffeine chlorogenate on spontaneous activity of mice, III, 615.
- Trier, E. See Lund, H.
- Trier, M. See Nielsen, N. A.
- Trifonova, A. N., physiology of differentiation and growth; effect of asphyxia on development and mitotic division in fish embryo, III, 224.
- Trikojus, V. M. See Loeser, A.
- Trillat, J. J., recording of electron-diffraction patterns, I, 222. Electron diffraction with low voltages, I, 513.
and Merigoux, R., effects produced by bombarding a metallic surface with fast electrons, I, 394, 441.
- Trintignac, P. See Enselme, J.
- Tripp, F. See Holmes, A. D.
- Trister, S. M. See Paesu, E., and Stehle, R. L.
- Tristram, G. R., basic amino-acids of leaf proteins: methods of analysis, III, 951.
- Trivedi, S. A. See Tawde, N. R.
- Tromel, G., and Ehrenberg, W., expulsion of fluorine from pure fluorapatite by ignition in presence of water vapour and silica, I, 334.
- Trofimenko, A. P., and Babak, S. F., effect of acetone on optical rotation of tartaric acid and on the rate of its reaction with ethyl alcohol, I, 529.
- Troisier, J., Bariety, M., and Kohler, D., effect of sympathomimetic drugs on intrapleural pressure, III, 1001. Nicotinic poisons and intrapleural pressure, III, 1085.
- Troitzki, G. V., microchemical analyses using photo-cells, I, 104.
- Troland, C. E., and Lee, F. C., thrombocytopen, III, 231.
- Trombe, F., determination of quartz by differential thermal analysis, I, 156.
- Trommsdorff, H. See Kleinfeller, H.
- Tromp, H. von H., petroleum cannot be generated in limestones, I, 164.
- Tronchetti, F., effect of posterior pituitary gland on exchange of sodium chloride, III, 678.
- Tronci, L., tissue respiratory metabolism during pregnancy, III, 295.
- Tronev, V. G., and Bondin, S. M., action of hydrochloric acid on noble metals under high pressures of air, I, 86.
- Tronev, V. G., and Bondin, S. M., oxidation of zinc sulphide and transference of zinc into aqueous or alkali solution at air pressure, I, 528.
See also Zvjagintzev, O. E.
- Tronstad, L. See Flood, H., Kielland, J., and Stokland, K.
- Tropp, C., new lipins from the reticulo-endothelium in relation to brain lipins, III, 1062.
and Poulikakos, P., urinary porphyrin. IV. and V., III, 392.
- Troschtschenko, A. T. See Voroshnev, N. N., jun.
- Troszkiewiczówna, C. See Sucharda, E.
- Trotter, M., classification of hair, III, 154. Classification of hair colour, III, 957.
- Trpinac, P., necessity of thiol groups for activity of glyceraldehyde dehydrogenase, III, 870.
See also Rapkine, L.
- Trueblood, H. C., and Longbridge, D. H., scattering and photo-electric absorption of high-voltage X-rays in nitrogen, I, 2.
- Truesdail, J. H. See Williams, Roger J.
- Truffaut, R., alkylation of aromatic hydrocarbons and their halogen derivatives by olefines and their halogen derivatives in presence of sulphuric acid as catalyst, II, 253.
- Truhaut, R. See Sannie, C.
- Truhlar, J., Dreker, L., McGuire, G., and Falk, K. G., enzyme action. II. Phosphatase actions of tissues of normal and rachitic rats, III, 424.
- Trumble, H. C. See Strong, T. H.
- Trumpy, B., secondary actions of the weak and penetrating components of ultra-radiation, I, 116.
- Trunel, P., electric moments in homologous series, I, 511.
- Truog, E., and Pearson, R. W., determination of iron in presence of titanium using zinc reduction, I, 100.
- Turnit, H. J., heat production of spinal cord of frogs. I. Methods. II.—IV., III, 245.
- Trusova, K. I. See Erofeev, B. V.
- Truszkowski, R., control of vitamin-active products in Poland, III, 284.
Blauth-Opieńska, J., and Iwanowska, J., parathyroid hormone. I. Assay, III, 975.
- Trzebiatowski, W., existence of β -phase in the arsenic-antimony system as a reply to P. E. Wretblad, I, 145.
- Trzeciakowski, Z. See Krause, A.
- Tsai, B. See Bizette, H.
- Tsai, C., rate of water diuresis in decerebrated and hypophysectomised cats, III, 844.
and Lin, C. Y., density of animal tissues, III, 695.
and Wu, C. H., vital capacity of senior middle school and college students [in China], III, 661.
See also Lin, C. Y.
- Tsamboulas, N., and Malikiosis, X., Cabot rings in erythroblasts, III, 741.
- Tsatsaris, B., thermal and lighting conditions for cinematography of formation of first polar body in mouse, III, 890.
See also Gothié, S., and Moricard, R.
- Tschagovetz, R. V., physico-chemical changes in tissue colloids due to muscle activity; change in adsorptive properties of muscle, III, 242. Change in weight and dry content of muscles in connexion with their function, III, 242.

- Tschagovetz, R. V., Kovaleva, O. V., and Schevko, A. D., change in the reduction potential of urine as a result of physical training exercises, III, 170.
- and Scheinkman, E. A., relation between weight of tissues in air and water; rapid determination of dry content of tissues, III, 220.
- Tschall, P. P., conductivity in the systems β -silver sulphide-sulphur and β -silver iodide-thallium iodide, at 25° and 35°, I, 83.
- Tschanukvadze, O. P. See Klotschko, M. A.
- Tschapek, M. V., and Shuravel, P. V., swelling of xerogels and powdered disperse substances during sorption of water vapour, I, 610.
- Tscheischwili, L., Büsser, W., and Weyl, W., metakaolin, I, 587.
- Tschelincev, V. V., condensations of furan derivatives. X. Furan derivatives analogous to chalkones, II, 196.
- and Kuznetsov, G., condensation of furan compounds. IX. Eutectics of ketone-phenol systems and oxonium complex formation, II, 161, 334.
- Tschelinceva, G. V. complexes of magnesium bromide with terpene ketones and alcohols, II, 120.
- Tscheltzova, M. A. See Petrov, A. D.
- Tschepelevetzkii, M. L. See Markova, G. A.
- Tschepelkin, J. N. See Afanasiev, S. K.
- Tschepinoga, O. P. See Soreni, E. T.
- Tscherenkov, P. A., absolute output of radiation caused by electrons moving within a medium with super-light velocity, I, 171. Spectrum of visible radiation produced by fast electrons, I, 230. Spatial distribution of visible radiation produced by fast electrons, I, 230.
- Tscherkaschin, E. B. See Petrenko, B. G.
- Tscherkasova, E. D. See Schuilkin, N. I.
- Tscherkes, L. A., vitamin-A treatment of retinitis pigmentosa, III, 752.
- Tschermak-Seysenegg, A., micro-crystallisation studies with supersaturated solutions, I, 411. Electrical phenomenon in crystallisation, I, 554.
- Tscherne, B. See Engelhart, E.
- Tscherniachivski, A. G., development and terminations of the depressor nerves, and development of the innervation of the paraganglia: paraganglion aorticum supracardiale and glomus aorticum, in the human, III, 371.
- Tscherniaev, I. I., development of Werner's theory, as applied to complex compounds, I, 128.
- and Gelman, A., isomerism of platinum ethylene chlorides, I, 94.
- and Schirokova, V. N., reduction of ammonium iridochloride with sugars, I, 86.
- Tscherniaev, V., determination of Rydberg constants for hydrogen and deuterium, I, 111. Influence of noble gases on intensity of lines of hydrogen and deuterium Balmer series. II, I, 165. Wave-length measurements of deuterium and hydrogen Balmer lines. I, I, 165.
- Tscherniaeva, O. A., blood and hamopoietic organs of dogs with a direct Eck fistula, III, 446.
- Tscherniak, E. L., specific heat, density, and vapour pressure in the system methyl alcohol-water-lithium chloride, I, 312.
- Tschernojarova, A. A., esters of isooleic acids, II, 297. Structure of petroselinic acid, II, 297.
- Tschernova, N. G. See Kazanski, B. A., and Michailov, B. M.
- Tscherntzov, O. M., reaction for distinction of fructose from glucose, II, 142.
- and Drozdov, N. S., meso-derivatives of acridine. XIII. Preparation and antimalarial action of substituted 5-aminoacridines, II, 562.
- Tschesche, R., and Wolf, H. J., active principle of liver in pernicious anaemia, III, 647.
- Tscheschov, A. M. See Voronina, E. V.
- Tschirkov, S. K., distribution of isomorphous salts during crystallisation of their aqueous solutions, I, 253.
- and Schneer, M. S., distribution of Br⁻ in the system carnallite-water, I, 413. Distribution of I⁻ between the solid and liquid phases during crystallisation of potassium and sodium bromide and potassium chloride, I, 413.
- Tschirkova, L. A. See Epshtein, D. A.
- Tschitschibabin, A. E., condensation of aldehydes and ketones with ammonia to give pyridine bases; condensation with cyclic ketones, II, 283.
- and Hoffmann, C., 8-amino-6-methoxyquinoline and its derivatives, II, 227. Colour reaction for identification of 8-(diethylaminoisoamyl)amino-6-methoxyquinolino (plasmaquino, praquino), II, 566.
- and Vialatout, M., 2-aminopyridine-5-sulphonic acid and derivatives, II, 281.
- Tschoidtze, V. I. See Maximov, N. A.
- Tschopp, E. See Miescher, K.
- Tschopp, W., acute myeloblast leukaemia, III, 349.
- Tschubel, H. See Merz, K. W.
- Tschuchrov, F. V., linarite in ore deposits of Kazakhstan, I, 437.
- and Senderova, V. M., herrngrundite from the Uspensky mine in Kazakhstan, I, 499.
- Tschufarov, G. See Buinov, N., and Tatievskaja, E. P.
- Tschugunova, O. K. See Raduschkevitch, L. V.
- Tschukavin, M. K., and Markelova, M. N., combustion method of determining sulphur, I, 276.
- Tschuliatikova, A. J. See Obergard, I. A.
- Tschulkov, P. M., exchange of sodium and calcium ions on glauconite, I, 531.
- Tschulok, S., Lamarck as a biological theorist, III, 889.
- Tschumanov, S. M., and Axelrod, M. B., colorimetric determination of carbon monoxide, I, 215.
- Tschunichina, I. K. See Gerasimov, J. I.
- Tscizuki, M. See Yanagisawa, K.
- Tseou, H. F., "effective electron density" and chemical behaviour, I, 553.
- and Yang, C. T., condensation of aminocethers with naphthols, cresols, and naphthylamines, II, 386.
- Tsubaki, I. See Kawai, S., and Kawamura, R.
- Tsuchida, R., extended co-ordination theory of valency. I. Configuration of simple compounds of typical elements. II. Configuration of carbon compounds, I, 357, 358.
- and Kobayashi, Masahisa, spectrochemical study of microscopic crystals. I. Application of microscopes in spectrography, I, 43. Extended co-ordination theory of valency. III. Valency bonds in carbon compounds. III, I, 599.
- Tsuchiya, H., isolation of larvæ of *Trichinella spiralis* for preparation of antigen for immunological reactions in trichinosis, III, 942.
- and Bauerlein, T. C., intradermal test as an aid in diagnosis of enterobiasis, III, 532.
- Tsuchiya, S., Japanese twin embryos. I. Arteries of heart. II. Veins of the heart. III. Morphology of the foramen ovale, III, 346. Size and weight of hearts of Japanese twin embryos. II, III, 738. Shape of foramen ovale cordis of Japanese twin embryos. II, III, 738. Arteries of heart of Japanese twin embryos. II, III, 956. Veins of heart of Japanese twin embryos. II, III, 956. Bacteriological and immunological experiments on *Salmonella B*-group, III, 1013.
- Tsuda, K., and Ichikawa, Z., soya-bean saponins. V, II, 273.
- and Kazano, T., identity of soja-sapogenol B with a new sterol ("sapogenol") from shoyu oil, II, 436.
- Tsuge, T. See Konishi, K., and Sugawara, S.
- Tsuji, H., acute pancreatic necrosis in Japan; surgical aspect, III, 1053.
- Tsuji, K., action of the thyroid on elimination of foreign substances from the organism, III, 138. Pathogenesis of paroxysmal paralysis of the extremities, III, 567.
- Tsuji, S., Chikamutsu, H., Izumi, F., and Hishida, Y., pathogenesis of immunocytotoxic glomerulonephritis, III, 915.
- Tsuji, Y. See Itano, A.
- Tsujimoto, M., kikyô root. IV. Hemolytic action and toxic properties, III, 552.
- and Matsumoto, T., kikyô root. VII. Mol. wt. and hydrolysis of platycodin, II, 470.
- and Senju, R., kikyô root. VIII. Constitutional formula of platycodigenin. IX. Mol. wt. of platycodigenin, II, 556.
- Senju, R., and Matsumoto, T., kikyô root. VI. Colloidal properties of platycodin (kikyô saponin), III, 515.
- Tsumita, Y. See Akahira, T.
- Tsuru, K., association of several thermal and stress minerals in the Yu Hsi Kou iron-bearing district, I, 47.
- Tsutsulopulos, G., action of sex hormones on intestinal function, III, 913.
- Tsutsumi, S., catalysts for synthesis of liquid hydrocarbons from carbon monoxide and hydrogen. IV. Catalysts prepared by the roasting method, I, 424.
- Tsuzuki, Y. optical activity and chemical structure in tartaric acid. VII.-IX., I, 303, 357; II, 357. Synthesis of cyclic derivatives of tartaric acid. V. Optical activity and chemical structure, II, 140. Optical activity and chemical structure in tartaric acid; synthesis of cyclic derivatives of tartaric acid by condensing alkyl *d*-tartrates with aromatic aldehydes, II, 201.
- Tsuzuki, Z. See Sumi, M.
- Tuarze, L. See Leulier, A.
- Tucholski, T., thermal decomposition of potassium picrate, I, 268.
- Tuck, J. L., radioactive sulphur for biochemical experiments, I, 532.
- Tuck, R., Valdez Creek mining district, Alaska, in 1936, I, 47.

- Tucker, H. F., and Eckstein, H. C., effect of supplementary lysine, methionine, and cystine on production of fatty livers by high-fat diets containing gliadin, III, 65.
- Tucker, S. H., generator for air-free carbon dioxide (or hydrogen), I, 434.
- Tudhope, G. R., complex malignant mammary tumour, III, 700.
- Türkel, E., use of argotropin as a urinary disinfectant, III, 89.
- Tuerkischer, E. See Stein, L.
- Tüscher, H., treatment of ovarian insufficiency after pregnancy with cyren, III, 982.
- Tuft, L., Wenger, L. J., and Frankel, J. J., preservation of reaginogenic serum by lyophilisation, III, 192.
See also Gunther, C. B.
- Tui, C., physiology of spinal anaesthesia, III, 314.
- Tukamoto, M., production of β -3-hydroxy-6-ketoallocholanolic acid from 3:6-diketo-cholanolic acid in the toad and from α -3-hydroxy-6-ketochohanolic acid in the rabbit, III, 926.
- Tukamoto, T., camphor derivatives. III. Derivatives of camphor containing sulphur, II, 434.
- Tukey, G. See Adams, A. E.
- Tulane, V. J. See Wilkerson, V. A.
- Tulasne, R., experimental evolution of precipitins of Eberth's bacillus measured photometrically, III, 203.
- Tullis, I. F., jun. See Davis, H. A.
- Tulloch, C. W., and McElvain, S. M., piperidine derivatives. XIV. Local anaesthetics derived from α -picoline, II, 279.
- Tully, R. H. See Musulin, R. R.
- Tully, W. C., nutritional disease of chicks caused by feeding dried eggs, III, 166.
- Tultschinskaja, K. Z., preparing vitamin-B₁ from brewer's yeast, III, 165.
and Kusova, Z. B., biological assay of vitamin-B₁ from brewer's yeast, III, 165.
- Tumanski, S. S. See Zeziulinski, V. M.
- Tunbridge, R. E. See Alibone, E. C.
- Tunell, G., rotation factor for equi-inclination Weissenberg photographs, I, 579.
- Mervin, H. E., and Ksanda, C. J., crystallography of potassium tetrathionate, I, 185.
See also Ksanda, C. J.
- T'ung, T. See Chung, H., and Wong, S. C.
- Tunnichiff, R., opsonins for *Diplococcus morbillorum* and for *Streptococcus scarlatinae* in convalescent measles and scarlet fever sera and placenta extract, III, 1012.
- Tuohy, E. B., anaesthetic procedures used at the Mayo Clinic. IV. For operations on the breast, chest, and abdomen, III, 412.
- Tuomikoski, P., following the process of diffusion by [electrical] capacity determinations, I, 192.
- Tuot, M., interpretation of secondary reactions observed in the condensation of aliphatic ketones and esters with organo-magnesium compounds; theoretical, II, 102. Carbonation of organo-magnesium compounds and the accompanying secondary reactions in the aliphatic series, II, 304.
- Tupikova, N. See Gerard, R. W.
- Tappa, K., alcohol and intelligence, III, 93.
- Turchan, E. J. See Kuzminich, I. N.
- Turchetti, A., changes in venous pressure in normal subjects due to drugs, III, 459. Pharmacology of β -p-hydroxyphenylisopropylmethylamine ("veritol"), III, 508.
- Turek, J. A. V., jun. See Gilman, H.
- Turfreijer, A., Wibaut, J. P., and Boltjes, T. Y. K., the green fluorescent pigment of *Pseudomonas fluorescens*, II, 129.
- Turin, J. J., and Crane, H. R., stopping of the recoil electrons produced by the fluorine + proton γ -rays, I, 3. Energy loss of high-energy β -rays in lead, I, 293.
- Turkevich, A. See Beach, J. Y.
- Turkevich, J. See Gilbert, W. I., and Taylor, H. S.
- Turkiewicz, N., transformation of formals into halogen compounds, II, 304.
See also Pilat, S.
- Turlur, J. See Lespagnol, A.
- Turnbull, D., and Phipps, T. E., periodic deviation from the Schottky line. II, I, 589.
- Turnbull, S. G. See Small, L.
- Turner, A. J., rapid calculation of relative humidity from readings of the Sling hygrometer, I, 494.
- Turner, C. D., homoplastic transplantation of suprarenal glands of rat into the anterior chamber of the eye, III, 42. Intra-ocular homotransplantation of prepuberal testes in the rat, III, 591.
- Turner, C. L., adaptations for viviparity in embryos and ovary of *Anableps anableps*, III, 806.
- Turner, C. W., and Cupps, P. T., thyrotropic hormone in the pituitary of the albino rat during growth, pregnancy, and lactation, III, 677.
See also Bergman, A. J., Gomez, E. T., Holst, S., Houchin, O. B., Lewis, A. A., Peterson, V. E., and Reineke, E. P.
- Turner, E. B. See Mole, J. D. C.
- Turner, F. C., experimental treatment of tumours in mice. I. By phenanthrene derivatives, III, 990. Effects of ox bile and oestrin on development of tumours in mice, III, 1062.
- Turner, H. H., syndrome of infantilism, congenital webbed neck, and cubitus valgus, III, 38. Clinical use of synthetic male sex hormone, III, 755.
- Turner, H. S. See Norris, J. F.
- Turner, J. S., respiratory metabolism of carrot tissue. I. Material and methods. II. Effect of sodium iodoacetate on respiration and fermentation, III, 731.
- Turner, K. B., McAlpin, K. R., and De Lamater, A., blood-iodine in leukemia, III, 4.
and Steiner, A., variation of serum-cholesterol in man, III, 357.
- Turner, L. A. See Barschall, H. H.
- Turner, O. A., neurohistological technique, III, 809, 890, 958.
- Turova-Pollak, M. B., and Baranovskaja, N. B., isomerisation of polymethylene hydrocarbons in presence of aluminium chloride. II. Isomerisation of methylcyclopentane, II, 360.
and Makaeva, Z., isomerisation of polymethylene hydrocarbons with aluminium chloride, II, 536.
and Poljakova, O. I., isomerisation of polymethylene hydrocarbons in presence of aluminium chloride. I. Propylcyclopentane, II, 360.
- Turovets, I. M., basal metabolism and blood chemistry in old age, III, 118. Changes in the blood of neuropaths during fatigue, III, 118. Senility in Abchasian centenarians. IV. Basal metabolism and biochemical changes in the blood, III, 393.
See also Bazilevitsch, I. M., and Tonkonogi, I. G.
- Turowska, A. See Krause, A.
- Turpin, R., Serane, J., and Valletta, J., variation in hepatic glutathione of albino rats as a function of growth, III, 149.
- Turska, E. See Dorabalska, A.
- Turska-Jaroszewiczowa, H. W. See Lesnianski, W.
- Turu, H., inoculation of *Blastomyces* into skin of human beings and animals, III, 201.
- Turvey, S. E. C. See Cleveland, D. E. H.
- Tusques, J., formation of islets of Langerhans from acinar tissue in castrates, III, 477. Innervation of chromatophores, III, 644. Nerve network in tail membrane of tadpoles examined *in toto*, III, 900.
- Tustanovski, A. See Borovskaja, V.
- Tutakin, P. M. See Neuman, M. B.
- Tuttle, L. W., Scott, K. G., and Lawrence, J. H., phosphorus metabolism in leukæmic blood, III, 1079.
- Tuttle, W. W. See Morehouse, L. E.
- Tutumi, Y. See Hatakeyama, T.
- Tuturin, I. V. See Braz, G. I.
- Tuve, M. A., droplet fission of uranium and thorium nuclei, I, 296.
- Tuzson, P. See Zechmeister, L.
- Tweddell, J. T., use of iron preparations in treatment of anaemia, III, 116.
- Tweedy, W. R., Templeton, R. D., Patras, M. C., McJunkin, F. A., and McNamara, E. W., effects of calciferol in the thyroparathyroidectomised-nephrectomised rat, III, 705.
- Twenhofel, W. H., and Broughton, W. A., sediments of Crystal lake, an oligotrophic lake in Vilas Co., Wisconsin, I, 283.
- Twigg, G. H., mechanism of catalytic exchange reactions between deuterium and olefines, II, 465.
and Rideal, E. K., exchange reaction between ethylene and deuterium on a nickel catalyst, I, 377.
See also Conn, G. K. T., and Cragford, S. R.
- Twiss, J. R., and Barnard, J. H., disease of biliary tract associated with disturbances in cholesterol metabolism, III, 273.
- Twombly, G. H., production of mammary carcinomas in male mice with a single implantation of oestrone, III, 1052.
- Twomey, I. See Outhouse, J.
- Twort, C. C. See Twort, J. M.
- Twort, J. M., and Twort, C. C., comparative activity of carcinogenic hydrocarbons, III, 491.
- Twort, R. J. See Parsons, F. B.
- Tyden, H., fractionation of cellulose, II, 301.
- Tyler, A., and Horowitz, N. H., energetics of differentiation. VII. Respiratory rates of parthenogenetic and fertilised *Urechis* eggs, III, 683.
See also Morgan, T. H.
- Tyler, A. W., β - and γ -radiations from ^{64}Cu and ^{152}Eu , I, 505.
- Tyler, D. B. See Greeley, P. O.
- Tyler, M. W. See Isenberger, R. M.
- Tyler, S. A., and Marsden, R. W., heavy mineral methods applied to the pre-Cambrian rocks of the south shore of Lake Superior, I, 343.
- Tyler, W. P. See Clark, G. L.
- Tyndale, H. H., Levin, L., and Smith, Philip E., responses of normal and hypophysectomised immature rats to menopausal urine injections, III, 265.
- Tyndall, A. M. See Munson, R. J.
- Tyo, S., blood vessels of stomach of rabbit and dog, III, 955.

- Tyray, E. See Spath, E.
- Tyrén, F., optical *L* spectra of the elements chromium to cobalt in the extreme ultra-violet, I, 111.
- See also Edlén, B.
- Tyrrell, W. A., jun., nuclear five-body problem, I, 507.
- Carroll, K. G., and Margenau, H., binding energies of light nuclei, I, 297.
- Tyson, F. T., preparation of *m*-bromobenzaldehyde, II, 22. Synthesis of isouinolone acids, II, 125.
- Tyson, R. M., Konzelmann, F. W., Lennon, H. C., and Eymann, H., nutritional anaemia, III, 350.
- Tyte, L. C., rate of viscous flow of metals. II. Lead, I, 249.
- Tyzzer, E. E., Sellards, A. W., and Bennett, B. L., occurrence in nature of "equine encephalomyelitis" in the ring-necked pheasant, III, 335.
- Tzschnovitzer, M. M., Goldenberg, I. J., and Palant, B. L., heterogenous anaphylaxis, III, 354.
- Tzeitin, C. L. See Perschke, V. K.
- Tziganova, P. A. See Smorodincev, I. A.
- Tzivina, B. S., and Dobkina, B. M., colorimetric determination of arsenic by the hypophosphite method, I, 156.
- Tzschaschel, R., new sensitive light-counter, I, 160.
- Tzukerman, V. A. See Altschuler, L. F.
- Tzukernik, M. V., effect of hibernation on the glycogen, lactic acid, and ketone contents of the organism, III, 608.
- Tzukervanik, I. P., condensation of alcohols with aromatic compounds in presence of aluminium chloride. VI. Alkylation of halogen-substituted aromatic hydrocarbons with alcohols, II, 252.
- and Nazarova, Z. N., condensation of aldehydes and ketones with aromatic compounds in presence of aluminium chloride. I. Condensation of aliphatic ketones with phenols, II, 311.
- and Sidorova, N. G., condensation of alcohols with aromatic compounds in presence of aluminium chloride. IX. Condensation of 2-methylcyclohexanol, menthol, and borneol with benzene and toluene, II, 252.
- U.
- Ubbelohde, A. R., multiple-exposure X-ray spectrometer, I, 388.
- and Woodward, (Miss) I., isotope effect in potassium dihydrogen phosphate, I, 600.
- See also Oldham, J. W. H., and Robertson, J. M.
- Ubisch, L. von, germ layer chimaera in sea-urchin larvae, III, 346.
- Uchino, T., and Hosaka, I., micro-determination of formaldehyde by the dimedon method in diphtheria prophylacticum, III, 202.
- Uchiyama, K., penetration of light through dense fog, I, 257.
- See also Kinoshita, M.
- Uchtomski, A. A., physiological inactivity and lability, as biological factors, III, 277.
- Ueko, H., staining of vaginal smears, III, 144. Importance of serum-proteins for the result of the Takata reaction, III, 554.
- Udgård, A. See Zintl, E.
- Udovenko, V. V., viscosity in the systems: ketones-organic acids. I, I, 606.
- Ueberwasser, H. See Erlenmeyer, H.
- Ueda, H. See Sasaki, Takuoki.
- Ueda, U., amyostatic poisons; synthesis of polyaminohydrocarbostyryls, II, 447.
- Uehlinger, E., tumour production with radioactive substances, III, 491.
- See also Jadassohn, W.
- Uemura, T., decomposition of amino-acids by *Aspergillus oryzae*, III, III, 725.
- Uemura, Taku, and Inamura, Y., spectrochemical study of complex colouring matters. I. Metallic complexes of 2:2'-dihydroxyazobenzene, II, 16.
- Üstun, Z., experimental transplantation of ovaries, III, 1052.
- Üstinyar, H. See Arndt, F.
- Uexküll, T. von, blood-sugar curves after oral administration of galactose [test of liver function], III, 593.
- Ufacker, H., action of "dextropur" on gastric secretion, III, 269.
- Uga, T., oxygen metabolism of tubercle and acid-fast bacilli, III, 104.
- Ugami, S., biological activity of methyl-dihydrotestosterone, a synthetic male sex hormone. III. Effect on castrated young male rats, with special reference to histological structure of the pituitary, III, 385.
- and Susuki, S., biological activity of methyl-dihydrotestosterone, a synthetic male sex hormone. IV. Effect on normal young male rats, with special reference to the effect on the testis, III, 385.
- See also Iwata, M.
- Uggeri, B., effect of inactivated adrenaline on chromatophores of teleost fish (*Scardinius erithrophthalmus*), III, 911.
- Uher, V., experimental leukæmoid changes, III, 114.
- Uhl, A., assimilation and the cause of its variation in the genus *Pinus*, III, 636.
- Uhlenhuth, P., and Wurm, K., Hodgkin's disease, III, 891.
- Uhlmann, F., and Nobile, F., improved isolated mammalian heart preparation, III, 557.
- Uhnou, B., lipins of gastric mucosa, III, 269.
- Uhr, J. S., gangrene of the toes following pneumococæmia; treatment with sulphanimide, III, 1082.
- Ujije, K., relation of liver injury brought about by hepatotoxin to the toxicity of different narcotics, III, 272.
- Ujsághy, P., simple test for differential diagnosis of meningitis and encephalitis, III, 32.
- Ukil, A. C., tuberculosis among industrial workers in India, III, 1092.
- Ukita, oil of kostus root, III, 950.
- Uleich, J., recording and determination of the force of the heart, III, 557.
- Ulich, H., approximate formulae for calculation of the free-energy changes and conditions of equilibrium of reactions from thermo-chemical data, I, 474.
- and Fragstein, P. von, kinetic study of the Friedel-Crafts benzophenone synthesis, I, 205.
- Ullal, V. V., and Wheeler, T. S., preparation of flavones from *o*-aroyloxyacetophenones, II, 124.
- Ullrich, F., formation of ozone by heating persulphate solutions containing sulphuric acid in its dependence on concentration of acid and in presence of cellulose, I, 427.
- Ullrich, H., and Canel, M., photoperiodic action of light spectrum on *Isaria* summer barley, III, 718.
- Ulliot, G. E. See Fuson, R. C.
- Ulpts, R. G. E., morphological studies on physiology of the red cells and genesis of the blood platelets, III, 5.
- Ulrich, A. L. C., experience with camphor metrazol treatment of schizophrenia at Buffalo City Hospital, N.Y., III, 672.
- Ulrich, R., quantitative variations in fatty acids, sterols, and phospholipins during the maturation of the fruit of the ivy, III, 730.
- Ulrychova, M. See Bureš, E.
- Ulvesli, O., mineral balances in milch cows, III, 398.
- Umber, F., Storing, F. K., and Engelmann, G., clinical experiences with new Nativ-insulin depot, III, 909.
- Umbreit, W. W. See Wilson, P. W.
- Umeda, two rare malignant growths of the thyroid gland, III, 257.
- Umeda, K., Debye temperature of the liquid droplet model of the atomic nucleus, I, 237. Contribution of oscillation binding to the nuclear excitation energy, I, 447.
- Umejima, H. See Shibata, R.
- Umezawa, S., synthesis in the selenophen series. IV. Introduction of side-chains into the selenophen nucleus, II, 460. Micro-determination of selenium in organic compounds, II, 526.
- and Masamune, H., detoxication of ingested naphthalene and excretion of [conjugate with] uronic acid, II, III, 302.
- See also Tamamushi, B.
- Umrath, K., absolute refractory period following two successive excitations, III, 828.
- Underhill, S. W. F., physiological action of vitamin-E and consequences of -E deficiency. III. Vitamin-E deficiency and endocrine glands, III, 1074.
- and Coward, K. H., crystalline esters of vitamin-A. II. Biological potency, III, 601.
- Underkofler, L. A. See Fulmer, E. I., Lesh, J. B., and Whistler, R. L.
- Underwood, E. J., comparison of ferrous and ferric iron in nutrition of the rat, III, 72.
- Harvey, R. J., and Beck, A. B., biochemical data on blood and urine of sheep in botulism areas of Western Australia, III, 943.
- Ungar, A. See Anschutz, L.
- Ungar, C., pathway of nerve fibres to the hypophyses, III, 44.
- Ungar, Georg, theory of photodichroism, I, 180.
- Ungar, Georges, augmentation of oxytocic action of cerebrospinal fluid by light, III, 578.
- and Boigert, M., prevention of pulmonary lesions caused by irritant gases, III, 461. Liberation of a histamine-like substance following inhalation of irritant vapours, III, 507.
- and Parrot, J. L., nature of substance liberated in antidromic vasodilation, III, 562. Effect of hemorrhage on histaminase activity of plasma, III, 624. Effect of sympatholytic substances on enzymic transformation of adrenaline into a hypotensive substance, III, 911.
- See also Tinel, J.

- Ungerleider, *H. E.*, and Clark, *C. P.*, transverse heart diameter in the teleorontgenogram, III, 557.
See also Wright, *I. S.*
- Ungnade, *H. E.*, and Smith, *L. I.*, vitamin-E. XV. Extension of analytical method of Furter and Meyer, II, 557.
See also Smith, *L. I.*, and Webb, *T. J.*
- Ungrecht, *M.*, relations of the human reticulocytes in the bone marrow and in the peripheral blood, III, 3.
- Uniński, *H.* See Koprowski, *H.*
- Unna, *K.*, toxicity and pharmacology of nicotinic acid, III, 288.
See also Folkers, *K.*
- Unsold, *A.*, continuous spectrum of the mercury high-pressure lamp, the underwater spark, and similar gas discharges, I, 50.
- Untersteiner, *L.*, effect of 3:5-dimethylisoxazole-4-carboxyldiethylamide on the isolated frog's heart. I. Normal heart. II. Hypodynamic heart, III, 965.
and Garbarino, *G.*, pharmacology of "carbantren" and hydroxyquinoline bismuth iodochloride, III, 616.
- Unwin, *J. J.* See Bates, *D. R.*
- Uotila, *U. U.*, role of cervical sympathetics in regulation of thyroid and thyrotropic function, III, 908. Role of pituitary stalk in regulation of thyrotropic and thyroid activity, III, 1047.
- Upham, *J. H. J.*, blood dyscrasias, with special reference to splenectomy, III, 893.
- Uppal, *I. S.*, and Venkataraman, *K.*, sulphonation of methylaniline, II, 150.
- Upson, *F. W.*, Noyce, *W. K.*, and Albert, *W. D.*, action of barium hydroxide on monobasic sugar acids. III, II, 242.
- Upthegrove, *C.* See Kirkendall, *E.*
- Uramoto, *S.*, investigations in nerve-muscle physiology, III, 565.
- Urbach, *E.*, Linneweh, *F.*, and Greenberg, *S.*, blood urticaria, III, 1090.
- Urbain, *A.*, Cahen, *R.*, Pasquier, *M. A.*, and Nouvel, *J.*, action of zinc on effects of testosterone and the prolans, III, 267.
- Urban, *E. C. J.*, granite workers' nasal resistance in breathing, III, 317.
- Urban, *M.*, determination of urinary albumin by Esbach's method; errors due to the temperature factor, III, 844.
- Urbánski, *T.*, Malendowicz, *W.*, and Dybowski, *K.*, action of ultra-violet rays on glyceryl nitrate, I, 530.
and Simon, *J.*, possible dimorphism of trinitrobenzene, II, 497.
- Urbányi, *L.* See Marek, *J.*
- Urey, *H. C.*, Mills, *G. A.*, Roberts, *I.*, Thode, *H. G.*, and Huffman, *J. R.*, vapour pressure and exchange constants of isotopic compounds, I, 198.
See also Cohen, *H.*, Mills, *G. A.*, Roberts, *I.*, and Thode, *H. G.*
- Urmánczy, *A.* See Plank, *E.*
- Urmy, *T. V.* See Jones, *C. M.*
- Urquhart, *R. W. I.* See Nicholson, *T. F.*
- Urry, *W. D.* See Evans, *R. D.*, and Rakestraw, *N. W.*
- Urushibara, *Y.*, and Simamura, *O.*, mechanism of oxygen effect on hydrogen bromide reacting with ethenoid compounds, II, 530.
- Ury, *B.*, and Gelhorn, *E.*, influence of anoxia on pupillary reflexes in rabbit, III, 750. Role of sympathetic system in reflex dilatation of pupil, III, 1040.
- Usanovitch, *M.*, acids and bases, I, 358.
- Uschakov, *M. I.*, Ivanova, *M. I.*, and Koscheleva, *N. F.*, catalytic hydrogenation of mixtures of hydrochlorides of pyridine bases, II, 281.
and Liutenberg, *A. I.*, oxidation of cholesterol and *trans*-dehydroandrosterone with osmium tetroxide, II, 328.
and Madaeva, *O. S.*, reaction of cholesterol α -oxide with magnesium methyl iodide, II, 367.
- Uspenskaja, *S. I.* See Brodovitch, *L. A.*
- Uspienskaya, *G. S.*, thyroid gland and temperature in intoxication, III, 377.
- Ussanovitch, *M.*, physico-chemical analysis diagrams of binary liquid systems. II, I, 364.
- Ussher, *N. T.* See Elliot, *A. H.*
- Utamura, *M.* See Okamoto, *K.*
- Utterback, *C. L.* See Bremner, *R. W.*
- Uyemura, *S.* See Uemura.
- Uyeo, *S.*, and Katayanagi, *M.*, synthesis of methyl 3-bromohydrastate, II, 425.
and Sakamoto, *S.*, organic micro-analysis. IV. Simple volumetric micro-determination of ionisable organic halogen derivatives with adsorption indicators, II, 462.
See also Higasi, *K.*
- Uyterchoeven, *W.*, and Verburg, *C.*, electron temperature, T_e , in an alternating-current (50~) positive column discharge; experimental method, I, 114. Electron temperature, T_e , in an alternating-current positive column discharge (50 cycles per second); results for neon, I, 167. Electron temperature, T_e , in an alternating current (50 cycles per second) positive column discharge; measurements in a neon-sodium mixture (sodium-vapour lamps), I, 168.
- Uzan, *M.* See Jahiel, *R.*
- V.
- Vaala, *G. T.* See Norris, *J. F.*
- Vacareanu, *V.* See Enescu, *J.*
- Vacherat, *R.* See Gaudin, *O.*
- Vadilo, *P. S.*, investigating the structure of ice, I, 457.
- Vafiadi, *V. G.*, absorption spectra of fats in the infra-red region, I, 300.
- Vague, *J.* See Cornil, *L.*, and Olmer, *D.*
- Vahlquist, *B.*, determination of porphobilinogen in urine from cases of acute porphyria, III, 761.
See also Waldenström, *J.*
- Vahramian, *A. T.*, overvoltage of silver, I, 421, 525.
- Vaidya, *P. B.* See Paranjpe, *G. R.*
- Vail, *S. S.*, changes in intramural ganglia of large intestine in chronic experimental colitis and lesions of celiac ganglion, III, 593.
- Vaillant, *C.*, and Gillis, *L.*, night-blindness treated with vitamin-A, III, 284.
- Vaillant, *P.*, passage of an [electric] current in copper iodide, I, 201.
- Vainschtein, *G. M.*, conductometric titration of sulphates, I, 95.
- Vainschtein, *P. R.*, development of red blood cells [in chick embryos], III, 447.
- Vaisberg, *L. M.* See Martschuk, *P. D.*
- Vaisberg, *M.*, inexpensive small constant-temperature bath, I, 220.
- Vaisman, *A.* See Levaditi, *C.*, and Passet-douet, *H.*
- Vaissière, *G.* See Tiffeneau, *M.*
- Vaizey, *J. M.* See Rowlands, *R. A.*
- Vajifdar, *M. B.* See Majumdar, *V. D.*
- Valancogne, *F.* See Ricard, *R.*
- Valats, *A.* See Baisset, *A.*
- Valatz, *M.* See Dufrenoy, *J.*
- Valdiquié, *P.*, determination of polypeptides in biological liquids containing thiocyanates, III, 735.
See also Brustier, *V.*, Moog, *R.*, and Riser, *M.*
- Valensi, *G.* See Markowska, (*Mme.*) *D.*
- Valente, *F. A.* See Hornbostel, *J.*
- Valenti, *A.* See Palmieri, *G. G.*
- Valentin, *F.* See Khouvine, (*Mme.*) *Y.*
- Valentine, *F. C. O.*, and Butler, *E. C. B.*, specific immunity in acute staphylococcal osteomyelitis, III, 630.
- Valentiner, *S.*, and Haberstroh, *A.*, solid solutions of indium and lead, I, 138.
- Valeri, *C. M.*, glycolysis *in vitro* of muscle of febrile animals, III, 663.
- Valette, *G.*, and Cavier, *R.*, effect of alkaline soaps, bile salts, and digitonin on mixtures of lecithin and cholesterol, I, 78.
and Rollé, *R.*, action of quinine on amebæ; penetration of cells and toxicity, III, 427.
- Valgy-Nagy, *T.* See Jeney, *A. von.*
- Valiř, *R.* See Weber, *K.*
- Valjaschko, *M. G.* See Feigelson, *I. B.*
- Valjaschko, *N. A.*, and Schtscherbak, *M. M.*, absorption spectra and constitution of benzene derivatives. V. 3-Hydroxy- and 3:5-dihydroxy-benzaldehyde, I, 299. Spectrographic study of the action of alkalis on resorcinol. I. Resorcinol and its methyl ether. II. Dihydroresorcinol and resorcinol in sulphurous acid solution. III. Diphenyl derivatives, II, 259.
- Valk, *J. H. van der.* See Hamaker, *H. C.*
- Valkenburg, *J. J.*, systems of "knallgas" with hydrogen chloride, carbonyl chloride, and difluorodichloromethane ("freon") as extinguishers, I, 30. Explosion limit curves. III. Systems $H_2-O_2-N_2$, $H_2-O_2-CO_2$, and H_2-O_2-A , I, 30.
- Vallance, *R. H.* See Friend, *J. N.*
- Vallarta, *M. S.*, effect of earth's magnetic field on cosmic rays, I, 116. Are there multiple charged primary particles in cosmic radiation? I, 296.
- Graef, *C.*, and Kusaka, *S.*, galactic rotation and intensity of cosmic radiation at the geomagnetic equator, I, 175.
- Valle, *G.*, and Dascola, *G.*, luminescence counters, I, 581.
- Valle, *J. E. L.* See Blacet, *F. E.*
- Valle, *J. R.*, and Porto, *A.*, effect of testosterone on descent of artificial testes, III, 983. Effect of sex hormones on *in vitro* reactions of vas deferens and seminal vesicle of guinea-pig, III, 984. Reactions *in vitro* of vas deferens and seminal vesicle from normal and castrate guinea-pigs, III, 984.
See also Martins, *T.*
- Vallebona, *A.*, ray sensitisation by physical methods, III, 937.
- Vallée, *J.*, no more colloids! I, 196.
- Vallery-Radot, *P.*, Blondin, *S.*, Israel, *R.*, and Cachin, *C.*, arterial hypertension with renal ischaemia, III, 22.
- Valletta, *J.* See Turpin, *R.*
- Valley, *G.* See Buck, *J. H.*
- Valley, *G. E.*, and McCreary, *R. L.*, internal conversion electrons from ^{80}Br , I, 294.

- Valsö, J., hormone content of pituitary of blue whale (*Balaenoptera sibbaldii*). IV. Posterior pituitary hormones. V. Thyrotropic hormone, III, 1048.
- Valvekar, R. K. See Jatkar, S. K. K.
- Valvo, N. I. See Shadle, A. R.
- Van Allen, J. A., Ellett, A., and Bayley, D. S., cross-section for the reaction $^3\text{H} + ^2\text{H} \rightarrow ^1\text{H} + ^3\text{H}$ with a gas target, I, 547.
- Van Alstine, H. E. See Bassett, S. H.
- Van Atta, F. A., identification of silver, I, 487.
- Van Atta, L. C., Clogston, A. M., and Puls, H. O., beryllium targets, I, 341.
- Vance, J. E., and Bauman, W. C., reaction of hydrogen atoms with carbon tetrachloride, I, 84.
See also Murphy, G. M.
- Vancea, M. See Spacu, G.
- Vancea, P. See Michail, D.
- Vandaveer, R. L., standardisation of acidimetric solutions, I, 576.
- Vandel, A., genetics of albinism in terrestrial isopods, III, 957.
- Vandendries, K., and Gavaudan, P., action of colchicine on lower organisms, III, 872.
- Vander Veer, A. H., and Reese, H. H., treatment of schizophrenia with insulin shock, III, 131.
- Vandervelden, F. See Wuyts, H.
- Van der Wal, R. J. See Ralston, A. W.
- Van der Zwan, A. See under Zwan, A. van der.
- Vande Velde, A. J. J., chemical composition of the sea mussel (*Mytilus edulis*), III, 488.
- Vandevelde, J. See De Waele, H.
- Vandoni, R., measurement of partial vapour pressure of cyclopentanone solutions, I, 145.
- Van Dyke, H. B., and Chen, G., biochemistry of the genital tract of the female macaque particularly during the menstrual cycle, III, 144. Assay of progesterone by production of artificial pregnancy-response of feline uterus, III, 1056.
- Van Ess, P. R. See Gilman, H.
- Vanghelovici, M., introduction of nitrogen into sterols. III. Preparation of deoxy-cholamine. IV. Condensation of bile acid hydrazides with carbonyl compounds, II, 546, 548.
- Van Hook, A., supersaturation and Liesegang ring formation. I. and II., I, 78.
- Van Horn, K. R. See Kempf, L. W.
- Vanjukov, M., and Frisch, S., isotopic displacement of samarium lines, I, 440.
- Vanjukova, L. See Bruns, B., and Kabanov, B.
- Van Klooster, H. S., Amos Eaton as a chemist, I, 162.
- Vanlandingham, A. H. See Shirley, R. L.
- Van Liere, E. J., Northup, D., and Sleeth, C. K., effect of acute hæmorrhage on absorption from the small intestine, III, 270.
See also Northup, D.
- Vann, F. H. See Chesley, L. C.
- Vannfalt, K. A., action of glucose on tar-tumours in mice, III, 699.
- Vannotti, A., relation between local and general damage in industrial poisoning (based on a case of mercury poisoning), III, 95. Porphyrins and industrial pathology, III, 95. Therapeutic use of vitamin-B₂, III, 766.
and Blunschy, A., capillarisation and nutrition of the heart. VI., III, 654.
- Vannotti, A., and Markwalder, H., erythro-poiesis at high altitudes, III, 810.
See also Hein, G.
- Vannucchi, R. See Pirrone, F.
- Vanoni, E. P., 1000 kv. generator for production of radioactive substances, I, 581.
- Vanossi, R., arrangement for measurements with the dropping mercury electrode (Heyrovský polarograph), I, 389.
- Vanpee, M. See Mund, W.
- Van Peurseem, R. L. See Eck, J. C.
- Van Rysselberghe, P., conventions and assumptions in the interpretation of experimental data by means of the Gibbs adsorption theorem, I, 21.
and Lee, G., conductivities of concentrated mixtures of the nitrates of uni-, bi-, and ter-valent cations in aqueous solution, I, 28.
- Van Slyke, D. D., determination of solubilities of gases in liquids with use of the Van Slyke-Neill manometric apparatus for both saturation and analysis, I, 627.
See also Farr, L. E., Folch, J., and McCarthy, E. F.
- Van Vleck, J. H., magnetic behaviour of vanadium, titanium, and chrome alums, I, 131. Jahn-Teller effect and crystalline Stark splitting for clusters of the form XY_6 , I, 131. Forward scattering of neutrons by paramagnetic media, I, 396.
See also Bardeen, J., and King, G. W.
- Van Voorhis, C. C. See Ladenburg, R.
- Van Voorhis, S. N. See Kuerti, G.
- Van Winkle, C. C. See Altnow, H. O.
- Van Winkle, W., jun. See Hanzlik, P. J.
- Varadanam, C. I., and Rao, G. Gopala, photosensitisation by stannic oxide, I, 88.
- Varangot, J., effect of single injection of œstradiol on the uterus of the immature rat, III, 480, 1053. Effect of testosterone and its esters on genital organs of female mammals and women, III, 1056.
See also Aschheim, S.
- Vardon, A. C., and Roy, B. K. D., papain-casein culture medium for the preparation of bacteriophage and for general laboratory use, III, 334.
- Varela, M. E., and Mancini, R. E., hæmatopoietic system of *Bufo arenarum* (Hensel); topography, cytology, and seasonal variations, III, 546.
- Vargas, L., jun., and Lipschütz, A., genesis of conjunctive tumours caused by œstradiol benzoate, III, 396.
See also Jedlicky, A., Koref, O., and Lipschütz, A.
- Vargha, L. See Geiger, E.
- Vargus, J. A., jun., angular distribution of cosmic-ray particles scattered in 1 cm. of platinum, I, 593.
- Varićak, T. D., fat substances in the epidermis of the bird's skin, III, 223.
- Varney, R. N. See Mitchell, A. C. G.
- Varossieau, W. W. See Gaillard, P. J.
- Vars, H. M. See Cajori, F. A., Goldschmidt, Samuel, Ravdin, I. S., and Stengel, A., jun.
- Vartanian, A. T., fluorescence spectra of aniline vapour, I, 241. Oxidation of thin films of calcium exposed to light in presence of hydrogen, I, 272. Quenching of fluorescence and photo-thermal decomposition of aniline, I, 404.
See also Terenin, A.
- Vartiainen, I., and Bastman, L., retardation of effect of insulin by arginine, III, 582.
- Vartiovaara, U. See Waksman, S. A.
- Varvoglis, G. A., re-esterification of phenolic esters of carboxylic acids in presence of inorganic salts, II, 64.
- Vascellari, F., seasonal variations of amounts of ozone and comparison of amounts contained in marine and urban regions of Rimini, I, 495.
- Vasenin, F. I., equilibrium phases in the system $\text{CaO}, \text{Cr}_2\text{O}_3 - \text{CaO}, \text{Al}_2\text{O}_3$, I, 612.
- Vasiček, A., artificially prepared surface layers on glass, I, 256.
- Vasilenko, V. C., metabolism in circulatory insufficiency, III, 459.
- Vasilescu, V. See Ribaud, G.
- Vasiliev, P. S., and Deschalič, N. M., determination of degree of dispersity of leuco-compounds by diffusion method, I, 416.
- Vasilii, G., and Radvan, S., cyclohexane series. II. Synthesis of ketones, III, 550.
- Vaskevitch, D. N., and Bulanova, T. F., esterification of alcohols, II, 198.
- Vassiliadis, C. See Karantassis, T.
- Vassiliadis, H. C., fever therapy by electric means and its rationale, III, 93. Fever treatment of gonorrhœa, III, 418.
- Vassiliadis, P. C., and Chawarby, M., agglutination of typhoid-paratyphoid emulsions treated with chloroform, III, 207.
- Vassiliev, B. B., Portnov, M. A., and Shuravlev, A. M., significance of the cation and anion in processes of solvation and solution in liquid ammonia, I, 365.
- Vassiliev, G. A., and Voitkevitch, A. A., development and behaviour of thyroid-ectomised young rooks, III, 909.
- Vassiliev, S. S., coagulating action of alcohols on protein solutions and the Traube rule, I, 259.
- Vassiliev, V. G., and Sirkin, J. K., dipole moments of nitronaphthylamines, I, 182. Dipole moments of nitronaphthylamines, I, 242.
- Vassilieva, Z. A. See Karshev, V. I.
- Vassy, (Mme.) A., and Vassy, E., daily variations of the mean temperature of atmospheric ozone, I, 162. Atmospheric [light] absorption. I. and II., I, 167, 596. Influence of solar radiation on the mean temperature of atmospheric ozone, I, 391. Dissymmetry of ozone distribution in the two hemispheres, I, 495. Temperature of the stratosphere in high latitudes, I, 627.
- Vassy, E., atmospheric ozone. I. and II., I, 391, 627.
See also Dauvillier, A., Heller, W., and Vassy, (Mme.) A.
- Vatcher, S., angina in pernicious anæmia, III, 1031.
- Vau, E., migration of the external bony auditory meatus as a racial character, III, 223.
- Vaughan, J. C., and Chipman, J., solubility of nitrogen in molten iron-silicon alloys, I, 606.
- Vaughan, J. M., and Harrison, C. V., leuco-erythroblastic anæmia and myeloid-sclerosis, III, 547.
and Saifi, M. F., hæmoglobin metabolism in chronic infections, III, 814.
See also Elliott, G. A.
- Vaughan, S. L., rapid conversion of tryptophan into indole by resting *Bacterium coli*, III, 629.
and Wright, T., purpura hæmorrhagica, III, 816.

- Vaughan, W., method of comparing capacities at radio frequencies [and of determining dielectric constants], I, 492.
- Vaughan, W. C., dielectric constant, dipole moment, and molecular polarisation of 1:4-dioxan, I, 405. Dielectric constant of benzene, I, 453.
- Vaughan, W. E., and Rust, F. F., bromination of trimethylethylene, II, 95.
See also Groll, H. P. A.
- Vaughn, R., Mitchell, N. B., and Levine, M., Voges-Proskauer (VP) and methyl-red (MR) reactions in the *coli-aërogenes* group, III, 874.
- Vaupel, O. See Heike, W.
- Vauthey, M., test for vitamin-C deficiency, III, 496.
- Vauthrin, J., action of nitric acid on iron carbide, I, 576.
- Vaux, G., and Bannister, F. A., identity of zinckenite and keeleovite, I, 48.
See also Bannister, F. A.
- Vavilov, S. I., sensitivity of the retina to the ultra-violet spectrum, III, 674.
- Vavon, G., Bolle, J., and Calin, J., condensation of methyl chloro- and bromomethyl ether and aromatic compounds, II, 361.
- Calin, J., and Fouchier, J., action of halides on magnesium compounds, II, 146.
- and Monthéard, P., rate of formation of oximes, phenylhydrazones, and semicarbazones of hydroxy-aldehydes, II, 49.
- Vavrecka, I. See Wichterle, O.
- Vavrinecz, G., iodometric standard of high equivalent weight, I, 383. Crystallographic study of sucrose. V. Crystals from solutions of different purity; twinning types, I, 554.
- Vavshikovskaja, E. I. See Iljin, V. S.
- Včelak, V. See Quadrat, O.
- Veal, J. R., and Mellen, W., blood-oxygen changes after intermittent venous occlusion, III, 660.
- Vedder, A. See Freud, J.
- Veen, A. G. van, the sesquiterpene ketone from *Lampoejang pait* (*Zingiber amari-cans*), II, 382. Cassava leaves, a green vegetable of high [nutritional] value, III, 342. Can peach beans cause djengkol poisoning? III, 417. Isolation and constitution of the narcotic substance from kawa-kawa (*Piper methysticum*), III, 734.
- Veen, J. H. van der, and Ornstein, L. S., behaviour of the reflecting power of iron for visible light near the Curie point and the α - γ transition point, I, 362.
- Veer, J. B. V. See Edwards, J. C.
- Veer, W. L. C., melanin and its precursors. I, II, 563.
- Veeraraghaviah, J. See Rangaswami, S.
- Vegard, L., and Dørum, K. G., determination of temperature of the negative glow from band spectra, I, 543.
- Veghelyi, P. V., absorption studies in children with *Giardia lamblia* infections, III, 771. Celiac disease imitated by giardiasis, III, 1099.
- Vegni, A. C. See Migliavacca, A.
- Vehrs, H. See Vidgoff, B.
- Veibel, S., Lundquist, F., Anderson, F., and Frederiksen, E., preparation of primary alcohols by means of organo-magnesium derivatives, II, 355.
and Ottung, K., benzylisothiocarbamide and its application to the identification of organic acids, II, 473.
- Veiel, K., polyarthritis and Graves' disease, III, 680.
See also Dennig, H.
- Veihmeyer, F. J., and Hendrickson, A. H., soil moisture as an indication of root distribution in deciduous orchards, III, 211.
- Veil, C., mechanism of dilation of pigment cells in fish produced after injection of adrenaline, III, 1052.
- Veil, (Mlle.) S., cell combinations of silver and platinum in aqueous iodides; electrostatics of the Ag|I⁻ contact, I, 148. Borrowed periodicities derived from the spontaneous periodic precipitation of silver chromate by localised substitution, I, 320. Introduction of extraneous solutes into aqueous potassium iodide solution, and its electrostatic consequences, I, 324. Liesegang periodicities obtained by attack of coarse solid suspensions in gelatin, I, 370.
- Veillet, A. See Lafon, M.
- Veillon, R. See Prévot, A. R.
- Veingerov, M. L., sensitivity threshold of a gas radiometer, I, 280.
- Veitch, F. P., jun., Milone, H. S., and Everitt, E. L., hydrolysis of sterol glycosides by emulsin, III, 383.
- Veith, W., and Kirkpatrick, P., weak lines in the molybdenum L spectrum, I, 589.
- Veksler, V., non-ionising particles in the penetrating component of cosmic radiation, I, 400.
- Alexeeva, K., and Reinov, N., heavy electrons in cosmic rays, I, 174.
- Velghe, C. See De Hemptinne, M., and Mund, W.
- Velick, S. F., White, Julius, and Lewis, H. B., synthesis of dicholyleystine and cholyleysteic acid, II, 145.
- Velitzkin, R. See Amundsen, L. H.
- Vellard, J., geographical variations in venom of *Crotalus terrificus*, III, 415. Variations *in vitro* of the resistance of red cells to snake venom, III, 551. Variations in resistance of erythrocytes *in vivo* to the action of snake venom, III, 654. Composition and preparation of curare, III, 952.
- Vellenga, S. See Garrett, A. B.
- Velluz, L., importance of oxidation phenomena in the inactivation of toxins *in vitro*, III, 945.
and Le Lous, J., synthesis of esters by *Ricinus* lipase; effect of different organic solvents, III, 871.
- Velluz, L. See Dufraisse, C.
- Velluz, (Mme.) L. See Dufraisse, C.
- Veltman, P. L. See Daniels, F.
- Velu, H., and Zotner, G., sterilisation of bacteria in anti-*Brucella* vaccines treated with lanoline, III, 330.
- Vencou, S., ultra-violet absorption spectra of organic molecules, I, 239.
- Vendieg, V., glycogen production from butyric acid and acetoneuria, III, 501.
- Vène, J., different forms of β -ethylhydroxycampholic acid, and their transformation, II, 271. Action of organomagnesium derivatives on methyl camphoraldehyde, II, 272.
- Venez, J. See Chardonnens, L.
- Venkataraman, K. See Uppal, I. S.
- Venkataraman, K. S. See Raman, (Sir) C. V.
- Venkataraman, R. See Anantkrishnan, S. V.
- Venkataramiah, H. S. See Sibaiya, L.
- Venkatarayudu, T., normal frequency of the diamond lattice, I, 129.
See also Bhagavantam, S.
- Venkateswaran, C. S., low-frequency Raman lines in organic crystals, I, 120.
See also Raman, (Sir) C. V.
- Venkei-Wlassics, T., filterable viruses in fluorescent light, III, 1014.
- Venning, E. H., determination of sodium pregnenediol glycuronate in urine, III, 145.
- Ventre, J., biochemical study of wines affected by *Eudemis*. I, III, 726.
- Ventura-Gregorini, F., labyrinthine stimulation and vomiting, III, 905.
- Venturello, G., neutral and basic beryllium carbonates, I, 331.
and Agliardi, N., polyiodides and polyiodide ions; potassium polyiodides, I, 564.
- Venturoli, G., volumetric determination of carbon monoxide, I, 156.
- Venus-Danilova, E. D., and Bolschuchin, A. I., isomerisation of cyclohexylphenylacetaldehyde, II, 550.
and Kazimirova, V. F., aldehydes and hydroxylaldehydes of the polymethylene series. IX. Transformations of cyclopropylformaldehyde, II, 265.
- Vérain, M., Michon, P., Rousseaux, R., and Harmand, J., cell for measurement of the resistance of small quantities of biological liquids; application to cerebrospinal fluid, III, 937.
- Verardi, G., histophysiology of normal thyroid gland, of gland in Graves' disease, and during hypersecretion, III, 579. Lymphatics of human thyroid gland, III, 754.
See also Manzini, C.
- Verbanc, J. J. See Norris, R. O.
- Verbiest, H., influence of posterior column system on cortico-spinal innervation of the extremities; the flexor sign of the fingers, III, 736.
- Verburg, C. See Uytendhoeven, W.
- Vercellana, G. See Gozzano, M.
- Vercellone, A. See Dansi, A., and Morelli, E.
- Verdier, E. T., polarographic studies with the dropping mercury cathode. LXXVIII. Electrodeposition of manganese from cyanide solutions. X. Anodic oxidation of manganese tartrate and its analytical applications, I, 474, 489.
See also Audubert, R.
- Verdolin, J. See Chevallier, A.
- Verdonk, G., antagonistic action of different dosages of radium on cells cultivated *in vitro*, III, 319.
- Vergano, R. M., and Rivera, V., distant biological action of metals, III, 622.
- Verger, P., and Lafon, J., cataplexy, III, 831.
- Verhaart, W. J. C., connexions of red nucleus and its part in preventing decerebrate rigidity, III, 570.
- Verhaeghe, J., and Eyck, M. van, circular magnetic dichroism of cobalt thiocyanates, I, 357.
- Verhaus, J. See Hoog, H.
- Verhoeck, F. H., kinetics of decomposition of trinitrobenzoates in ethyl alcohol, I, 150.
and Marshall, A. L., vapour pressures and accommodation coefficients of four non-volatile compounds; vapour pressure of tri-*m*-cresyl phosphate over polyvinyl chloride plastics, I, 603.

- Verhoogen, J., thermodynamical calculation of the solubility of important sulphides up to 400°. I, 195. New data on volcanic gases: the 1938 eruption of Nyamagira, I, 541.
- Verhulst, J. See Thoreau, J.
- Verleger, H. See Angenetter, H., Stark, J., and Werz, R. von.
- Verlende, E. See Rutgers, A. J.
- Verleysen, A., potential function of halogenated derivatives of ethane and ethylene, I, 455.
- Verlot, M. G. See Cope, O.
- Vermaas, D. See Hermans, P. H.
- Vermehren, E., variations in plasma-phosphatase at different ages, III, 963. Variations in plasma-phosphatase in children at different seasons, III, 963. Plasma-phosphatase during pregnancy and lactation, III, 963.
- Vermehren, M. See Lundsteen, E.
- Vermes, E. See Leroux, R.
- Vermeulen, C. See Goodpasture, W. C.
- Verne, J., histochemical study of variations in the lipins in striated muscle fibres during excitation, III, 242. Histochemical study of variations in the lipins of striated muscle fibre in fasting and fattening, III, 242. and Verne-Soubiran, A., effect of some biochemical substances on metabolism of lipins in tissue cultures *in vitro*, III, 854.
- Verne-Soubiran, A. See Verne, J.
- Verner, A., and Tiurina, A., requirements of fungi for growth substances-B, III, 873.
- Verner, A. R., and Jurkina, V. I., nitrogen fixation by *Azotobacter*: role of B-growth-substances, III, 1099.
- Verner, G. See Müller, Alexander.
- Verney, E. B., and Vogt, M., hypertension of renal origin; convulsive "uræmia," III, 561.
- Vernon, A. A., [laboratory] experiment on liquid-vapour equilibrium for a two-component system, I, 225.
- Vernon, C. E. See Baly, E. C. C.
- Vernon, I. H. See Bennett, G. M.
- Vernon, W. H. J., Wormwell, F., and Nurse, T. J., thickness of air-formed oxide films on iron, I, 316.
- Vernov, S. N., latitude effect of cosmic rays in the stratosphere, I, 399, 445. and Mironov, A. V., study of cosmic rays in the stratosphere in the vicinity of the magnetic equator, I, 445.
- Veron, G., deflagration and detonation in a combustible gaseous mixture maintained at constant volume, I, 84.
- Verona, O., and Paganini, M. L., effect of animal hormones on general growth of castor-oil plants and formation of experimental tumours by *Bacterium tumefaciens*, III, 108. See also Baldacci, E.
- Verrier, M. L., Exner's theory and the comparative histophysiology of compound eyes, III, 834. Comparative histophysiology of the vertebrate fovea, III, 836. See also Escher-Desrivières, J., and Lederer, E.
- Verschaffelt, J. E., application of thermodynamical principles to thermal conduction, I, 68. Reversible and non-reversible processes, I, 363.
- Verstraete, A., and Cloetens, R., spontaneous hydrolysis *in vitro* of organic phosphorus compounds in serum, III, 819.
- Verstraete, E. O. K. See Ruysen, R. G.
- Vertue, H. St. H., eumydrine in pyloric stenosis, III, 690.
- Verweel, H. J., and Bijvoet, J. M., crystal structure of NaCN, I, 245. See also Harmsen, G. W.
- Verwey, E. J. W., electronic conduction of magnetite and its transition point at low temperatures, I, 588. and Niessen, K. F., electrical double layer at the interface of two liquids, I, 613. See also De Boer, J. H.
- Vezár, F., creatine metabolism in muscular dystrophy caused by vitamin-E deficiency: effect of tocopherol, III, 996. See also Pulver, R.
- Veselkin, P. N., pathogenesis of traumatic shock, III, 364.
- Vesell, M., cyclic treatment of case of secondary amenorrhœa of 10 years' duration, III, 59.
- Vespignani, P. M. See Allen, E.
- Vesselov, M. G., thermal expansion of liquids, I, 191.
- Vesselovsky, O. See Zunz, E.
- Vestin, R. See Euler, H. von.
- Vetter, J., behaviour of enterochromaffin cells in starved rodents, III, 63.
- Vetter, (Mlle.) M. See Forestier, H.
- Vetterlein, P., measurements of electrical excitation functions of mercury, I, 394.
- Veyron, J. See Brahic, J., and Mosinger, M.
- Vhay, J. S., pyrophyllite deposit in S.E. Newfoundland, I, 344.
- Vial, J. See Hermann, H.
- Vialatout, M. See Tschischibabin, A. E.
- Viallard, R., inflammation of gaseous mixtures by the electric spark; air-ethyl ether mixtures, I, 149.
- Vialli, M., reactions of venom of *Bufo vulgaris*, III, 597. and Erspamer, V., diazo-reaction. I. Diazo-reaction in acid and alkaline media, and in alkaline medium subsequently acidified. II. Limits and significance of Gebauer-Fülnegg's modification of Pauly's diazo-reaction. III. Significance and limits of Hanke and Koessler's proposed modification in the determination of tyrosine and tyramine, II, 527.
- Viallier, J. See Arloing, F., and Froment, R.
- Vian, (Mlle.) S. See Tian, A.
- Vianna, A. M., colour-blindness in a family, III, 473.
- Vianna Dias, M. See Moussatché, H., and Otorio de Almeida, M.
- Viau, O. C. See Taboury, M. F.
- Viaud, G., orientation of *Brachionus pala*, Ehrenberg, to two light-sources, III, 472. Photokinetic action of monochromatic radiations of equal energy on *Brachionus pala*, Ehrenberg, III, 837. Psychological and physiological considerations concerning animal phototropism, III, 837.
- Vicary, D. R., and Hinshelwood, C. N., kinetics of the sulphonation of nitrobenzene by sulphur trioxide, I, 570.
- Vicens, C. A. See Allen, F. M.
- Vicentini, V. See Mezzadrol, G.
- Viciu, E. See Sparchez, T.
- Vickerstaff, T. See Ewen, E. S.
- Vickery, H. B., and Pucher, G. W., metabolism of amides in green plants. III. Mechanism of amide synthesis, III, 799.
- Vickery, H. B., and Pucher, G. W., loss of carbon from excised rhubarb leaves during culture III, 800.
- Pucher, G. W., Schoenheimer, R., and Rittenberg, D., metabolism of nitrogen in leaves of buckwheat, III, 948. See also Pucher, G. W.
- Victor, J., and Potter, J. S., influence of transmitted leukaemia on metabolism of uninfiltated lymphoid tissue, III, 4. See also Mansfield, J. S.
- Vidacovitch, M., Frank, C., and Grandpierre, R., effect of vagotonin on vagal stimuli, III, 308. See also Franck, C., Grandpierre, R., and Santenoise, D.
- Vidal, C. See Carvalho, A.
- Vidal, J. L., role of transpiration and of carbon dioxide in the aetiology of calcareous chlorosis, III, 435.
- Vidgoff, E., Hill, R., Vehrs, H., and Kubin, R., inhibitory hormone of testes. II. Preparation and weight changes in sex organs of the adult male rat, III, 1057.
- Vidos, A. See Simon, Alexander.
- Vidyardhi, N. L., and Narasingarao, M., chemical examination of sugar-cane wax, II, 297.
- Viebel, S., and Hauge, N., identification and determination of carbonyl by p-carboxy-phenylhydrazine, II, 133.
- Viehoever, A., and Cohen, I., comparative physiological action of benzedrine (amphetamine) and derivatives on *Daphnia magna*, III, 511. Physiological action of *Veratrum viride* and *V. album*. I. Toxicity, III, 617.
- Vieillefosse, R., mechanism of the formation of the dichloride of sulphoacetic acid; multimolecular chloroanhydrides of sulphoacetic acid, II, 298. Partial hydrolysis of the dichloride of sulphoacetic acid, II, 357. and Feyel, P., determination of blood-urea by the xanth-hydrol method in presence of malonylurea derivatives, III, 893.
- Viel, G., celluloses of algæ, III, 537. Thermal fractionation of the gaseous products of heating of tunicins and of a biosynthetic cellulose, III, 874.
- Vieles, P., and Amir, M., ethyl hydrogen methylglycolates, II, 533. See also Godchot, M.
- Viennois, P. See Mouriquand, G.
- Vieregge, P. D., alveolar carbon dioxide changes from carbon dioxide baths, III, 899.
- Vierhapper, F. See Spath, E.
- Viets, H. R. See Schwab, R. S.
- Vieuchange, J., neutralisation of vaccinal virus by antiserum and localised passive immunity, III, 1015. and Galli, F., presence of a neutralising factor in the cutaneous lesion provoked by the intradermal inoculation of vaccinal virus, III, 946. Mechanism of the reactivation of formalin-inactivated neurovaccine by dialysis, III, 948. See also Galli, F.
- Viezeian, B. See Szebelledy, L.
- Vigdorov, S. A., preparation of potassium ferrocyanide from calcium cyanamide, I, 379.
- Vignalou, J. See Loeper, M.
- Vigness, I. See Watson, C. J.

- Vignoli, L., and Ben Khaled, A., micro-determination of tellurium; toxicological applications, I, 214.
See also Juillet, A., and Mercier, F.
- Viktorin, O., production of the long-lived radioactive cobalt isotope from nickel bombarded by fast neutrons, I, 172.
- Viktorov, M. M. See Schattenstein, A. I.
- Villar, G. E., is there a group of radioactive elements in the place reserved for actinium in the periodic system? I, 52.
- Villaret, M., and Cachera, R., pathogenic and experimental views of cerebral emboli, III, 33.
- Justin-Besançon, L., and Bardin, P., new indications for the therapeutics of pulmonary emboli, III, 86.
- Villars, R., effect of polonium on plant cells, III, 1017. Cytological effect of X-rays on plant cells, III, 1017.
- Villela, G. G., determination of aneurin in mate [tea] by the Schopfer-Jung method, III, 401. *Phycomyces* test for determination of aneurin in urine, III, 401. Presence of a growth factor (aneurin) in tea infusion demonstrated by the Schopfer-Jung test, III, 401.
- Vitamin-B₁ in cerebrospinal fluid, III, 703. Aneurin (vitamin-B₁) content of cerebrospinal fluid, III, 993.
- and Leal, A. M., new colour reaction of vitamin-B₁, III, 1070.
- Vilter, R. W., and Spies, D., antipellagic action of quinolinic acid, III, 1071.
- Vilter, S. P., and Spies, T. D., relationship between nicotinic acid and a co-dehydrogenase (cozymase), III, 603. Determination of the co-dehydrogenases I and II (cozymase) in the blood of diabetics in severe acidosis, III, 767.
- Vilter, S. P. See Vilter, R. W.
- Vilter, V., role of hormones in development of melanophore dilation in teleosts, III, 577. Pigmento-motor fibres in teleosts, III, 738.
- Vinal, G. W. See Craig, D. N.
- Vincent, D., acetylcholine and choline in tissues of guinea-pigs after injection of large quantities of acetylcholine hydrochloride, III, 394. Presence of substance resembling acetylcholine in blood of eserine-treated guinea-pig, III, 962. Rhythmic activity of leech muscle produced by antiseptics, III, 1001.
- and Jullien, A., choline ester content of the principal organs of *Murex*, III, 278. Esters of choline in molluscs, III, 776. See also Jullien, A.
- Vincent, D. F., improved design of voice key, III, 135.
- Vincent, H. B. See Sawyer, R. A.
- Vincent, J. F., and Spruiell, M. M., simple vibrator, I, 434.
- Vincent, J. R., Thompson, A. F., jun., and Smith, L. T., action of diazomethane on cyclohexane-1:4-dione, II, 165.
- Vincent, V., and Boisshot, P., nature and composition of the organic matter of North African phosphates; Gafsa phosphate, I, 164.
- Vincent, W. B. See Hoard, J. L.
- Vincienne, H., coexistence of tungsten and gold in the mineralised zone of Salsigne-Villaniere (Aude), I, 226.
- Vindigni, E., effect of digitalis infusions on the diuresis due to intravenous administration of hypertonic solutions of sodium chloride, III, 85.
- Vine, H. See Le Fèvre, R. J. W.
- Vinét, A., determination of adrenaline by new colorimetric technique; "virtual" adrenaline, III, 911.
- Vinogradov, A. P., geochemical investigation of the spreading of the Urov disease, I, 540.
- Vinogradov, A. V., colorimetric determination of bromides in presence of chlorides, I, 37.
- Vinogradov, N. V. See Majorov, F. P.
- Vinogradova, E. A., pathogenesis of pernicious anaemia, III, 447.
- Vinokurov, S. I., and Butom, M. L., reduction of dehydroascorbic acid by the liver, in connexion with decomposition of ascorbic acid in the rat, III, 604.
- Vinson, C. G., purification of tobacco mosaic virus, III, 433.
See also Hills, C. H.
- Vintilescu, I., Ionescu, C. N., and Solomon, M., biochemical synthesis of higher β -galactosides, II, 534.
- Violle, H., and Placidi, L., specific type of shock, III, 618.
- Virkar, V. V., and Wheeler, T. S., synthesis of linear naphthylflavone, II, 33.
- Virtanen, A. I., symbiotic nitrogen fixation in leguminous plants, III, 533.
and Arhimo, A. A., oxaloacetic acid in leguminous plants, III, 881. Formation of amino-acids in green plants with nitrate as nitrogen source, III, 1017.
- Arhimo, A. A., and Suomalainen, H., determination and occurrence of keto-acids in green plants, III, 1111.
and Erkama, J., enzymic deamination of aspartic acid, III, 196.
and Laine, T., ninhydrin reaction for determination of amino-acids, II, 43. Root nodule bacteria of leguminous plants. XXII. Excretion products of root nodules; mechanism of nitrogen fixation, III, 635.
- Virtue, R. W., and Doster-Virtue, M. E., production of taurocholic acid in the dog. II. Cystamine. III. Cystine disulphoxide, cysteinesulphonic acid, and cysteic acid. IV. Cysteine, homocysteine, and thioglycolic acid, III, 65, 406, 707.
- Vis, B., action of hydrazine, methylhydrazine, and dimethylhydrazine on halogenonitrobenzenes, II, 257. Derivatives of 1-hydroxy-1:2:3-benztriazole, II, 488.
- Vischer, A., intravital examination of bone marrow, III, 3. Ovalocytosis, III, 446. Duration of life of erythrocytes (transfusions of ovalocytic blood), III, 446.
See also Kapp, H.
- Vischnevskaya, K., conductivity of solid lead and potassium chlorides, I, 10.
- Vischnevski, A. V., local anaesthesia, III, 615.
- Vischniakov, A. P., determination of viscosity of extremely viscous liquids and sols, by the falling-sphere method, with counterweight, I, 45.
- Visintini, F. See Montalcini, R. L.
- Visscher, M. B., mechanical efficiency in cardiac failure, III, 360.
See also Barnes, R. H., Ingraham, R. C., Kabat, H., Moe, G. K., and Peters, H. G.
- Vissen, G. H. See Hoog, H.
- Vitanza, I. See Medes, G.
- Viteles, M. S., industrial psychology in Russia, III, 93.
- Vivien, J. H., hypophysectomy in a marine teleost, *Gobius paganellus*, L., III, 378. Role of the hypophysis in determining female genital cycle of a teleost, *Gobius paganellus*, L., III, 575.
- Vjachirev, D. A. See Petrov, A. D.
- Vladesco, R., and Bellea, L., potassium in human saliva, III, 156.
and Nichita, G., effect of pilocarpine on composition of blood and saliva, III, 861.
- Vladimirov, A. V., and Liaskovskaja, G. V., age and daily variations in citric acid content of leaves of *Nicotiana rustica*, III, 730.
- Vladimirova, M. E. See Chlopin, V. G.
- Vladimirskaia, M. A. See Rabinerson, A. I.
- Vles, F., and Gex, (Mlle.) M., relations between massivity effects in salts and certain ionic and atomic characteristics, I, 558.
- Vles, J. C., physicochemical properties of deoxycholic acid, I, 260.
- Vloed, A. van de, stoichiometry. III. Influence of molecular structure on latent heat of fusion; new mesomorphic state, I, 556.
- Vodorez, N. See Izmailov, N. A.
- Vogler, H. See Schenck, R.
- Voegt, H., plasmoeytomata outside the bone marrow, III, 227. Pulmonary changes in man due to X-ray treatment, III, 661.
- Voegtlin, C. See Earle, W. R.
- Voelker, C. H., dysphonia aspects of Mongolian imbecility, III, 565.
- Völker, O., porphyrins of feathers, III, 695.
- Völler, W., therapeutic effect of the Italian-Bulgarian cure of chronic epidemic encephalitis and Parkinsonism, III, 84.
- Voermann, G. L., reference temperatures for physical and physico-chemical magnitudes of [chemical] compounds, I, 310.
- Voge, H. H., exchange reactions with radi sulphur, I, 382.
- Vogel, A. J. See Cowan, D. M., and Jeffery, G. H.
- Vogel, B., circulation and purification of inert gases at pressures above 20 Torr, I, 583.
- Vogel, O. A., relation of lignification of the outer glume to resistance to shattering in wheat, III, 210.
- Vogel, R., heterogeneous equilibrium in binary mixtures with maximum vapour pressure, I, 200.
and Ergang, R., system iron-iron tungstide-iron titanide, I, 70. System iron-niobium, I, 70.
and Kasten, G. W., system iron-chromium-phosphorus, I, 194.
and Schlüter, W., iron corner of the iron-silicon-titanium system, I, 70.
and Wallbaum, H. J., system iron-nickel-nickel titanide Ni_3Ti -iron titanide Fe_2Ti , I, 465.
and Wüstefeld, A., system iron-iron sulphide-vanadium sulphide-vanadium, , 82.
- Vogelaar, J. P. M., and Erlichman, E., tissue culture technique, III, 958.
- Vogelenzang, E. H., occurrence of zinc in human blood, III, 355. Effect of zinc on iodine-binding power of insulin, III, 477.
- and Hulst, L. A., significance of zinc content of commercial insulin, III, 184, 380.

- Vogelsang, *G. M. D.* See Spruyt, *J. P.*
- Voges, *H.* See Sturm, *A.*
- Vogl, *A.*, acute thrombopenic purpura [after sedormid], III, 649.
- Vogt, *A.*, hypovitaminosis-*C*, III, 496.
- Vogt, *E.*, magnetism and metal research, I, 513.
- See also Hamilton, *W. F.*, and Römeke, *O.*
- Vogt, *H.*, anaemia in early childhood, III, 958.
- Vogt, *M.* See Verney, *E. B.*
- Vogt, *R. R.* See Anzilotti, *W. F.*, Baum, *A. A.*, Kolka, *A. J.*, Loritsch, *J. A.*, Norris, *R. O.*, O'Connor, *S. F.*, and Weber, *F. C.*
- Vogt-Möller, *P.*, clinical and veterinary uses of wheat-germ oil and vitamin-*E* preparations. I. Use in clinical and veterinary practice, III, 1074.
- Vohwinkel, *K. H.*, use of albugin in gonorrhoea, III, 1083.
- Voiculescu, *T.*, effect of lactic acid on acid-resistant bacteria, III, 945. Acid-resistant bacilli in vipers, III, 947.
- Voigt, *H. E.* See Chrometzka, *F.*
- Voigt, *R.*, preparation of crotyl halides, II, 45. Studying vasomotor effect of drugs on frog's lung, III, 561.
- Voigt, *W. W.*, primary giant granulosa-cell tumour of retroperitoneal origin with development into the mesosigmoideum, III, 381.
- Voit, *K.*, pathogenesis of uræmia, III, 694.
- and Arnold, *R.*, action of vitamin-*B*₁ on the gastric HCl, III, 591.
- and Borgard, *P.*, nuclear reaction in myeloid leukaemia, III, 813.
- Voitkevitch, *A. A.*, anterior lobe of the hypophysis, and experimental gigantism, III, 474. Structure and activity of the thyroid at various temperatures, III, 475. Influence of thyroidectomy on development of ducklings, III, 578. May structure and form variation of plumage following thyroidectomy be regarded as an index of its masculinisation? III, 578.
- See also Vassiliev, *G. A.*
- Volarovitch, *M. P.*, and Erochin, *I. S.*, thickness of the layers of dispersion medium in plastic suspensions of mica, I, 197, 416.
- Vold, *M. J.* See Vold, *R. D.*
- Vold, *R. D.*, and Vold, *M. J.*, thermodynamic behaviour of liquid crystalline solutions of sodium palmitate and sodium laurate in water at 90°, I, 145.
- See also McBain, *J. W.*
- Vollson, *L. G.* See Kazanski, *B. A.*
- Volinetz, *I. T.*, regeneration of plasmaproteins after loss of large amounts of food, III, 118.
- Volini, *I. F.*, and Flaxman, *N.*, tetralogy of Fallot, III, 236. Effect of non-specific operations on essential hypertension, III, 822.
- and Levitt, *R. O.*, venous blood pressure in mercurial diuresis, III, 614.
- Volk, *G. W.*, muscovite, I, 497.
- Volkenstein, *M. V.*, and Sirkin, *J. K.*, Raman spectra of pyrone compounds, I, 451. Raman effect of pyrone compounds and electronic resonance, I, 597.
- Volkoff, *G. M.* See Oppenheimer, *J. R.*
- Volkov, *K. P.*, dissociation of mixed isomorphous crystal hydrates, I, 16.
- Volkov, *K. P.*, and Almazov, *A. M.*, viscosity of semi-colloidal solutions of starch hydrolysis products, I, 23.
- and Savostianov, *E. A.*, vapour pressure of saturated aqueous sucrose at low temperatures, I, 15.
- Volkov, *N. F.* See Chopin, *V. G.*
- Volkova, *M. I.*, Gileva, *Z. M.*, Melentiev, *B. N.*, and Terechovko, *A. S.*, standard determination of phosphorus anhydride by the citrate method, I, 97.
- Volkova, *V. A.* See Schemjakina, *F. M.*, and Zviagintzev, *O. E.*
- Volkova, *Z. V.*, wettability of solids as a characteristic property of the molecular nature of their surfaces; new method for its measurement, I, 562.
- and Zaporoshetz, *A. V.*, adsorption of calcium and aluminium soaps of hydroxycarboxylic acids on asbestos surface, I, 561.
- Volklinger, *H.*, Freymann, (*Mme.*) *M.*, and Freymann, *R.*, influence of temperature on Raman spectrum of ammonium nitrate and sulphate, I, 355.
- Vollaire-Salva, *J.* See Grandchamp, *L. E.*
- Vollbrecht, *H.*, and Geilsdorf, *F.*, dropping apparatus for high-pressure and laboratory work, I, 223.
- Vollers, *H.* See Stippel, *F.*
- Vollmar, *H.*, effect of vitamins on tissue cultures, III, 889.
- and Inoue, *K.*, growth and metabolism of tissue cultures in radium-containing media, III, 889.
- Vollmer, *H.*, controlled insulin shock treatment of asthmatic children, III, 661. Treatment of rickets and tetany with a single massive dose of vitamin-*D*, III, 705. Distribution of vitamin-*D* in body after administration of massive doses, III, 1074.
- and Goldberger, *E. W.*, comparative study of tuberculin patch test and Mantoux intracutaneous test, III, 1103. Evaluation of tuberculin patch test (Vollmer-Lederle), III, 1103.
- Vollum, *R. L.* See Macgrath, *B. G.*
- Volman, *D. H.* See Blacet, *F. E.*
- Volmar, *Y.*, Duquenois, *P.*, and Ellert, *M.*, microcrystalline narcotine oxalate and phthalate, II, 457.
- Volovik, *B. E.*, microscopic study of processes of dendritic crystallisation, with exact time registration, I, 45.
- Volpiatto-Bertrand, *A.* See Cornil, *L.*
- Volqvartz, *K.* See Bronsted, *J. N.*
- Volterra, *M.*, urinary excretion of volatile phenols in pernicious anaemia, III, 1025.
- Volterra, *V.*, and Kostitzin, *V. A.*, toxic action of the medium [for *B. coli*], III, 434.
- Voltz, *F.* See Guertler, *W.*
- Vonderahe, *A. R.* See Morgan, *L. O.*
- Vondrašek, *O.* See Škrumovský, *S.*
- Vonk, *H. J.*, and Mennega, *A. M. W.*, p_H optimum of pepsin and p_H of the gastric contents, III, 63.
- Vonkennel, and Kimmig, determination of arsenic in the cerebrospinal fluid after administration of organic arsenic, III, 375.
- and Korth, chemotherapy of gonorrhoea with albugin, III, 410.
- and Schmidt, *W.*, permeability of the blood-cerebrospinal fluid barrier for sulphanilamide, III, 610.
- Vonsen, *M.* See Gale, *W. A.*
- Vonwiller, *P.*, microscopic studies on living nervous system, III, 1035.
- Vorbach, *O.* See Borsche, *W.*
- Vorbodt, *W.*, application of concentrated hydrogen peroxide solutions to oxidation of plant and animal material, for phosphorus determination, III, 1114.
- Vorhes, *F. A., jun.* See Klein, *A. K.*
- Vorišek, *J.* See Hovorka, *V.*
- Vormizeel, *H. von*, duro-pikro-fuchsin, a new stable and fast colour for van Gieson's dye mixture, III, 220.
- Vorobiev, *N. K.* See Goldschmidt, *V. A.*
- Vorobieva, *E. I.* See Scherlin, *S. M.*
- Voronina, *E. V.*, and Tscheschov, *A. M.*, blood-amylase in rabies, III, 323.
- Voronov, *N. M.* See Nemilov, *V. A.*
- Voroshcov, *N. N.*, and Kozlov, *V. V.*, naphthalene series. VIII. Preparation of 4-nitro-1-naphthylamine and of an azo-dye derived therefrom, II, 415.
- Kozlov, *V. V.*, and Travkin, *I. S.*, photosensitive nitro-compounds. VI. Certain nitronaphthalene derivatives substituted in the *o*- or *p*-positions with sulphur-containing radicals, II, 412.
- Voroshcov, *N. N., jun.*, and Kobelev, *V. A.*, exchange of chlorine substituted in aromatic nuclei for the amino-group. III. Kinetics of catalytic reaction of chlorobenzene with aqueous ammonia. IV. Kinetics of reaction of *p*-chloro-nitrobenzene with aqueous ammonia. V. Kinetics of reaction of *o*-chloro-nitrobenzene with aqueous ammonia, I, 616; II, 255. Relative reactivity of chloro- and bromo-nitrobenzenes, II, 537.
- and Trotschtschenko, *A. T.*, syntheses with *o*- and *p*-hydroxydiphenyls. III. 2-Hydroxydiphenyl-5-sulphonic acid and its derivatives, II, 315.
- Vorwerk, *W.* See Eekay, *P.*
- Vosburgh, *W. C.*, Derr, *P. F.*, Cooper, *G. R.*, and Bates, *R. G.*, silver and mercurous iodide electrodes, I, 613.
- Derr, *P. F.*, Cooper, *G. R.*, and Pettengill, *E.*, saturated standard cells with small temperature coefficients. IV. Addition of various sulphates to the electrolyte of the Weston cell, I, 613.
- and Dibeler, *V. H.*, lead-iodine voltaic cell, I, 567.
- and Parks, *H. C.*, saturated standard cells with small temperature coefficients. III. Cadmium-bismuth amalgams of constant cadmium activity, I, 267.
- Voskresenskaja, *N. K.* See Kurnakov, *N. S.*
- Voskresenski, *S. P.*, and Malaschenko, *E. N.*, inversion of sucrose in an ultra-high-frequency field, I, 619.
- Voskuyl, *R. J.* See Greene, *C. H.*
- Voss, *F.*, healing of a case of Boeck's sarcoid after irradiation with the carbon arc, III, 317.
- Voss, *H. E.*, alleged oestrogenic action of yohimbino, III, 982.
- Voss, *J.*, oxidation and reduction enzymes in *Triticum sativum*: use in differentiating varieties, III, 533.
- Voss, *V.*, arcs of various metals in capillary tubes, I, 50.
- Vosskühler, *H.*, structure of magnesium-strontium alloys, I, 412. Structure of magnesium-rich magnesium-lead alloys, I, 465.

- Vosskühler, P., deposition of iron which can be detected morphologically in the organism after administration of iron compounds. I, III, 409.
- Vossnack, R., formation of colour centres in potassium iodide crystals, I, 352.
- Votoček, E., and Krosák, A., side-chain derivatives of pyromucic acid, II, 173.
- Votoček, O., and Wichterle, O., tetrahydroxyadipic acid, II, 405.
- Voullième, R. See Ohle, H.
- Vovtschenko, G. V., energy indexes for activation of yeast protease, III, 1009.
- Voyatzakis, E., photo-electric effect and the photoconductivity of phosphorescent sulphides and fluorides, I, 452.
- Vozdvishenski, G. S., electrocrystallisation of metals. II. Ultramicroscopic study of the process, I, 196.
- Vreeland, J. See Todd, W. R.
- Vrkljan, V. S., R. S. Krishnan's reciprocity law of colloid optics, I, 140.
- Všetečka, L. See Melichar, B.
- Vucetich, D. See Sagastume, C. A.
- Vuillet, M. See Jullien, A.
- Vuilleumier, P., significance of negative pressure in pleural cavity, III, 1033.
- Vuks, M. See Gross, F.
- Vulfson, K. S., sensitivity threshold of a gas radiometer, I, 280.
- and Lambert, M. I., dispersion of light in a quartz crystal, I, 186.
- Vulliemoz, C. See Ramel, E.
- W.
- Wacek, A. von, and Kratzl, K., pyrogallol-acetone condensation products, II, 417.
- and Travnicek, F. K. J., mono- and diesters of pyrogallol, II, 416.
- Waehholder, K., urinary reduction value during administration of vitamin-C, III, 75. Therapeutic use of vitamin-B₁, III, 993.
- See also Burmeister, Hans.
- Wachner, G. See Seyfried, H.
- Wachsmuth, H., iodometric determination of potassium mercuri-iodide; volumetric determination of morphine, II, 134.
- Wachsmuth, H. O., test of respiratory function, III, 124.
- Wachtel, H. See Lackner, J. E., and Lustig, B.
- Wada, Masao (Kyushu), quantitative analysis of the alkali metals by the spectrographic method. I. Reciprocal effect of the alkali metals on the sensitiveness of the arc spectra to them, I, 215.
- Wada, Masao (Sendai), Hirano, T., and Tiba, M., augmenting action of nicotine on adrenaline secretion from adrenals of non-anesthetised dog, III, 712.
- Tanaka, Hidekazu, Hirano, T., and Taneiti, Y., effect of morphine on output-rate of adrenaline, blood-sugar level, and blood pressure in dogs, III, 614.
- See also Ochiai, E.
- Wada, Mizu. See Kuroda, C.
- Wada, S. See Kunimine, S.
- Wada-Setu, time of atrophy of the embryonic nuclear layer of cerebellum in Japanese, III, 642.
- Waddell, R. C. See Waldman, B.
- Waddell, W. W., jun., and Guerry, D., effect of vitamin-K on clotting time of prothrombin and blood, III, 770.
- Waddell, W. W., jun., Guerry, D., Bray, W. E., and Kelley, O. R., possible effects of vitamin-K on prothrombin and clotting time in newly-born infants, III, 960.
- Wade, A. E. See Mitchell, H. H.
- Wade, N. J. See Griffith, W. H.
- Wadleigh, C. H., and Shive, J. W., effects of boron deficiency in cotton seedlings, III, 882.
- Waelsch, H., and Borek, E., stability of the keto-acid from methionine, II, 496.
- and Dimter, J., ashing of organic matter with bromine + nitric acid, II, 94.
- Wagenaar, G. H., microchemical alkaloid reactions with a new reagent containing lead iodide, II, 236.
- Wagenen, G. van. See Dorfman, R. I., and Zuckerman, S.
- Wagener, H. P. See Keith, N. M.
- Wagener, H. S., Woltman, H. W., and Love, J. G., pituitary tumour associated with choked discs and normal peripheral fields of vision, III, 917.
- Wagener, S. See Heinze, W.
- Wager, H. G., growth and survival of plants in the Arctic, III, 210.
- Wager, L. R. See Deer, W. A.
- Wagelstein, J. M., sulphanilamide in the treatment of 106 patients with meningococci infections, III, 303.
- Wagner, A., transplantation of Ehrlich's mouse ascites carcinoma by organ emulsions, III, 158.
- Wagner, Alois, differences in the counting of H-rays by electrical and scintillation methods, I, 503.
- Wagner, C., transitions between organisation and disorganisation in solid and liquid phases, I, 131. Entropy changes on melting intermediate phases in binary alloys, I, 250.
- and Hauffe, K., stationary state of catalysts in heterogeneous reactions. II, I, 377.
- Wagner, E. See Köster, W.
- Wagner, E. C., and Meyer, J. F., liquid bath m.p. apparatus, I, 42.
- Wagner, H., infra-red cataract, III, 752.
- Wagner, J., Raman effect. CIII. Nitrogen compounds. XIII. Alkyl carbamates, I, 510.
- See also Bacher, W., Kahovec, L., and Reitz, A. W.
- Wagner, K. H. See Scheunert, A.
- Wagner, R. (Breslau), and Kreienberg, W., central inhibition. III. Latent inhibition, III, 129.
- Wagner, R. (Prag), and Pohlner, A., acridine derivatives in gonorrhoea therapy; flavicide as local anti-gonorrhoeal agent, III, 612.
- Wagner, W. See Rehn, E.
- Wagner-Jauregg, T., chemical study of bacterial toxins, III, 729.
- and Arnold, H., phosphatide acid-protein compounds; chaulmoogrovl-glycerophosphate-protein compounds, II, 132.
- Arnold, H., and Born, P., basic esters of aralkylacetic acids and their spasmolytic properties, II, 477.
- and Helmert, E., diene syntheses with derivatives of sorbic acid, II, 47.
- Wahl, A., Goedkoop, M. L., and Heberlein, E., derivatives of α - and β -naphthoic acids, II, 264.
- Wahl, R., inactivation and reactivation of bacteriophage by mercuric chlorido and by formaldehyde, III, 946.
- and Lewi, S., adsorption of the bacteriophage of *B. subtilis* on aluminium hydroxide, III, 946. Antigenic power of *B. subtilis* bacteriophage fixed on aluminium hydroxide; precipitant action of antibacteriophage serum, III, 946. Comparative antigenic power of bacteriophage in the free state or adsorbed on alumina in a single injection, III, 1014.
- Wahländer, H. See Lauenstein, F.
- Wahn, W., flocculation reaction for the diagnosis of syphilis; its sensitivity and characteristics with special reference to Meinicke's reaction, III, 1103.
- Wahramian, A. T., determination of cathode current density in connexion with the structure of electrolytic metal deposits, I, 35.
- Waider, J., left ventricular preponderance without arterial hypertension or aortic valve lesion, III, 655.
- Wail, S., changes in intramural nerve plexus of large intestine in colitis, III, 690.
- Wain, R. L. See Kenner, J.
- Wainwright, W. W., human saliva. V., III, 61.
- See also Becks, H.
- Waisbrot, S. W. See Wolfrom, M. L.
- Waisman, H. A. See Mickelsen, O., and Woolley, D. W.
- Waisman, R. C. See Youmans, W. B.
- Wait, G. R., coefficient of combination between small and large ions, I, 52.
- Waiz, R., diagnostic value of the plasma cell tendency in infectious mononucleosis, III, 448.
- Wajzer, J., formation of a glycogen-protein during synthesis of glycogen, III, 855.
- Wakabayasi, M. See Nakamura, H.
- Wakabayasi, Y., nucleic-deaminases. I. Guanine- and riboguanosine-deaminase. II. Riboadenylic acid-deaminases, III, 197, 721.
- Wakatsuki, K. See Ikeda, T.
- Wakutaki, T. See Kikuchi, Seishi.
- Wake, S. See Takasima, R.
- Wakefield, E. G., Power, M. H., and Keith, N. M., serum-sulphate, III, 651.
- Wakelin, R. W. See Peters, R. A.
- Wakeman, A. J. See Pucher, G. W.
- Wakerlin, G. E., bioassay of local anaesthetics, III, 314.
- and Chobot, G. R., does renin play a rôle in maintenance of normal blood pressure? III, 967.
- and Yanowitz, M., effect of normal and hypertensive dog plasma on surviving arterial rings, III, 1032.
- Wakim, K. G. See Kendrick, D. B., jun.
- Wakkie, J. G. See De Jong, H. G. B.
- Waksman, S. A., and Foster, J. W., respiration and lactic acid production by a fungus of the genus *Rhizopus*, III, 1010.
- and Vartiovaara, U., adsorption of bacteria by marine bottom, III, 337.
- See also Foster, J. W.
- Waksmundzki, A., connexion between dielectric potential and dissociation constant of organic bases, I, 263.
- Walbum, L. E., and Reymann, G. C., production of toxin by *Bacillus sordellii* (*Cl. sordellii*) in comparison with other *Clostridia*, III, 874.

- Walch-Sorgdrager, B. See Schuffner, W.
- Walcott, A. See Thannhauser, S. J.
- Wald, G., distribution of vitamin-A₁ and -A₂, III, 400. Porphyropsin visual system, III, 1042.
- Jeghers, H., and Arminio, human dietary night-blindness, III, 254.
- and Steven, D., human vitamin-A deficiency, III, 918.
- Wald, M. H., Lindberg, H. A., and Barker, M. H., toxic manifestations of thiocyanates, III, 779.
- See also Lindberg, H. A.
- Waldbott, G. L., and Ascher, M. S., urticaria of serum sickness type, III, 93.
- Ascher, M. S., and Rosenzweig, S., blood-sugar, blood pressure, and white blood cell count in allergic shock, III, 647.
- Walde, A. W., calculation of heat of reaction from equilibrium constants at two temperatures; new heats of ionisation of organic acids, I, 323.
- Walden, L., construction of laboratory electric furnaces and available materials, I, 158.
- Walden, P., crystal gazers and alchemists, I, 162. Development of Stahl's phlogiston theory, I, 283.
- Walden, R. See Bloch, L.
- Waldenstrom, J., and Vahlquist, B., production from porphobilinogen of uroporphyrin and porphobilin in acute porphyrinuria, III, 926.
- and Wendt, S., porphyrin metabolism, III, 772.
- Waldes, V., chemical effects on rhythm and retraction period of the cirri of *Balanus perforatus*, III, 845.
- Waldeyer, L., treatment of functional disturbances in gynecology, III, 585.
- Waldkotter, K. F., interaction of β -hydroxyethylamine and halogenonitrobenzenes, II, 18. Action of di-(β -hydroxyethyl)-amine, methylamine, and ethylamine on halogenonitrobenzenes, II, 150.
- Waldman, B., Waddel, R. C., Callihan, D., and Schneider, W. A., resonance processes in disintegration of boron by protons, I, 115.
- See also Benedetti-Pichler, A. A., and Collins, G. B.
- Waldmann, L., theory of the method of Clusius and Dickel for separation of gases, I, 341.
- Waldschmidt, W. A., and Gaines, R. F., occurrence of chrysoberyl near Golden, Colorado, I, 497.
- Waldschmidt-Leitz, E., nature and mode of action of enzymes, III, 321.
- Walen, R. J., and Haissinsky, M., new type of polarograph with solid electrodes, I, 389.
- See also Goldstein, L., and Haissinsky, M.
- Wales, W. T. See Hawking, F.
- Walinski, F., and Bleisch, I., blood-cholesterol content in artificial fever, III, 653.
- Walk, A., and Mayer-Gross, W., convulsion therapy with triazol 156, III, 249.
- Walke, H., Williams, E. J., and Evans, G. R., K-electron capture, nuclear isomerism, and the long-period activities of titanium and scandium, I, 443.
- Walker, A. E., thalamus of chimpanzee. II. Its nuclear structure, normal and following hemidecortication. IV. Thalamic projections to the cerebral cortex, III, 248, 372. Anatomical basis of the thalamic syndromes, III, 467.
- Walker, A. E., and Fulton, J. F., thalamus of chimpanzee. III. Metathalamus, normal structure, and cortical connexions, III, 31.
- Walker, A. M., antidiuretic effect produced by preparations of heparin, III, 10.
- Walker, B. S., iron of human blood serum, III, 121.
- and Walker, E. W., normal magnesium metabolism and its significant disturbances, III, 175.
- Walker, D. V. H. See Walker, T. F.
- Walker, E. See Hodes, H. L., and Posener, K.
- Walker, E. W. See Walker, B. S.
- Walker, Fletcher. See Harned, H. S.
- Walker, Frederick, quartz-diorite from Glenduckie Hill, Fife, I, 285.
- Walker, G. H., potassium iodide method of measuring solar radiations, I, 579.
- Walker, I. J. See Nowak, S. J. G.
- Walker, I. K., and Robertson, P. W., kinetics of bromine addition to olefinic compounds. II. Homogeneous mechanisms, I, 569.
- Walker, J., alkyl ethers of hydroxymethylencacetophenone, II, 115.
- Walker, J. T., spectrograph as an aid in criminal investigation, I, 485.
- Walker, O. J., August Kekulé and the benzene problem, I, 162.
- Walker, P. A., identification of normal stages in chick embryos, III, 443.
- Walker, R. D. See Sheppard, S. E.
- Walker, R. Y., qualitative study of eye movements of good readers, III, 133.
- Walker, T. F., and Walker, D. V. H., modification of the Aschheim-Zondek test, III, 265.
- Walker, T. K. See Johnson, E. M.
- Wall, C. See Rubin, M. A.
- Wall, C. N., atomic distribution function for liquid sodium, I, 133.
- See also Gingrich, N. S.
- Wall, F. T., infra-red absorption spectrum of benzoic acid, I, 119. Ionic character in diatomic molecules, I, 358.
- and Claussen, W. F., infra-red studies of glycols and ethoxy-alcohols, I, 596.
- Infra-red absorption spectra of carboxylic acids and of dibenzoylmethane and related molecules, I, 596.
- and McMillan, G. W., infra-red absorption of the phenylmethanes, I, 354.
- See also Buswell, A. M.
- Wall, M. E., rôle of potassium in plants. I. Effect of varying amounts of potassium on nitrogenous, carbohydrate, and mineral metabolism in the tomato plant, III, 881.
- Wall, T. F., magnetic quality of iron wire as influenced by the diameter, I, 65.
- Wallace, E. W. See Morris, H. J.
- Wallace, G. B., and Brodie, B. B., distribution of administered bromide in comparison with chloride and its relation to body fluids, III, 507.
- Distribution of iodide, thiocyanate, bromide, and chloride in the central nervous system and spinal fluid, III, 507.
- See also Elsasser, T. H.
- Wallace, S. R., jun., binocular interdependence. III. An active principle, III, 675.
- Wallace, W. McL. See Freeman, N. E.
- Wallart, J., staining of the hypophysis, III, 958.
- Wallbach, G., carbohydrate metabolism of cultures of leucocytes, III, 3. Fat metabolism of human leucocyte cultures, III, 3. Non-specific immunisation with calcium salts, III, 188. Actions of various calcium salts on the leucocyte reactions of the organism, III, 227.
- Wallbaum, H. J., and Witte, H., crystal structure of TiCO₂, I, 559.
- See also Vogel, R.
- Walle, P. V. See Putzeys, P.
- Wallenfels, K. See Hartmann, M., and Kuhn, R.
- Waller, L. S. See Tomschi, H. W.
- Waller, W. H., thalamus of the cat after hemidecortication, III, 31.
- Wallersteiner, K. See Willmer, E. N.
- Wallgren, A., renal lesions in children with erythema nodosum, III, 987.
- Wallich, R. See Portes, L.
- Walling, C., Kharasch, M. S., and Mayo, F. R., peroxide effect in the addition of reagents to unsaturated compounds. XX. Addition of hydrogen bromide to Δ^2 -butinene and β -bromo- Δ^2 -butene, II, 400.
- See also Kharasch, M. S.
- Wallis, E. S. See Bernstein, S., Gilbert, W. I., Ladenburg, K., and Yarnall, W. A.
- Wallraff, A. See Kaiser, Heinrich, and Tonutti, E.
- Walls, E. W., *Myrmecophaga jubata*: an embryo with placenta, III, 346.
- Walls, G. L., retinae of two opossum genera, III, 674.
- Walpole, A. L. See Linstead, R. P.
- Walsh, A. E. See Keffe, W. J.
- Walsh, A. I. See Looney, J. M.
- Walsh, M. N., and Love, J. G., meningeal response following subarachnoid injection of iodised oil, III, 253. Syndrome of the protruded intervertebral disc, III, 737.
- Walsh, R. P., and Rennie, A. T., M. & B. 693 in malaria, III, 857.
- Walsh, T. E., and Cannon, P. R., intranasal medication, III, 180.
- Walsh, W. L. See Milas, N. A.
- Walt, C. F. J. van der, and Merwe, A. J. van der, colorimetric determination of chromium in plant ash, soil, water, and rocks, III, 110.
- Walt, F., medulloblastoma in an infant with abnormal cells in the cerebrospinal fluid, III, 573.
- Walter, A. See Kubaschewski, O.
- Walter, F., and Addis, T., organ work and organ weight, III, 642.
- Walter, G., and Ammon, R., anaphylactic shock from protamine, III, 618.
- Walter, J. See Gorin, E.
- Walter, L. A., and Fosbinder, R. J., local anesthetics from β -2-piperidylethyl alcohol, II, 445.
- See also Fosbinder, R. J.
- Walter, R. I. See Salmon, U. J.
- Walter, W. G., technique and application of electro-encephalography, III, 34.
- Griffiths, G. J. and Nevin, S., electro-encephalogram in a case of pathological sleep due to a hypothalamic tumour, III, 247.
- See also Cook, L. C., and MacMahon, J. F.
- Walters, A. H., blood group technique, III, 1028.
- Walters, T. M. See Hinkel, L. E.
- Walters, W. See Kepler, E. J., and Rynearson, E. H.

- Walterskirchen, L., action of methylene-blue in methemoglobinemia, III, 450. See also Lachnit, V.
- Walther, B. See Gordonoff, T., and Hadorn, W.
- Walther, A. K. See Sinelnikov, K. D.
- Walther, G., anaphylaxis and vitamin-C, III, 780. Carbon monoxide poisoning and gastric secretion, III, 841.
- Walther, H. W. E., and Willoughby, R. M., hormonal treatment of benign prostatic hyperplasia, III, 268.
- Walther, R., and Beyer, K., effect of copper on toxicity of hydrocyanic acid, III, 865.
- Waltman, C. S., effect of autumn nitrogen fertilisation on the soluble nitrogen and phosphate content of dormant peach twigs, III, 799.
- Walton, E., amides of β -*p*-arsonophenylpropionic acid, II, 130.
- Walton, S. T., quick and reliable method for staining gonococcus smears, III, 1101.
- Walton, W. H. See Graham, J. I.
- Walz, E. M., response of the oyster heart to electrical stimulation, and effect of calcium and potassium on its threshold of inhibition, III, 18. Effect of chemicals on cochlear potentials, III, 838.
- Wambacher, H., multiple transmutation of atomic nuclei by cosmic rays; results from 154 transmutation "stars" on photographic plates, I, 117.
- Wan, S. W., and Chen, M. C., physico-chemical studies of α - and β -clausostearic acids. I. Molar refractivity and parachor, I, 553.
- Wanag, G., ethyl bisindanedionecarboxylate, II, 326. Preparation of *N*-substituted phthalimides, II, 506. and Lode, A., 2-oximino- or 2-nitrosoindane-1:3-dione? II, 119.
- Wang, B. L. E., incomplete development of diaphragm in mice causing death from asphyxia, III, 542.
- Wang, C. C., basal metabolism and preformed and total creatinine in urine of 70 children, III, 1076. See also Chang, H. C.
- Wang, C. F., and Wu, H., distribution of antibody in different tissues, III, 531.
- Wang, C. H. See Adolph, W. H.
- Wang, C. W., solutibosan and ureastibamine in treatment of kala-azar in Chinese hamsters, III, 414. Solutibosan in treatment of kala-azar in Chinese hamsters, III, 1088. See also Chou, C. Y.
- Wang, C. Y., and Chu, F. T., micro-method for determination of erythrocyte sedimentation rate in children, III, 550.
- Wang, J. S., statistical theory of superlattices with long-range interaction. I. General theory. II. The simple cubic lattice and the body-centred cubic lattice. I, 11.
- Wang, K. J., vagus-post-pituitary reflex. V. Secretory cells of pars nervosa, III, 474. See also Chang, H. C.
- Wang, P. See Roberts, R. B., and Salant, E. O.
- Wang, S. See Wessely, F.
- Wang, S. C., vasomotor responses from application of drugs to the medullary region, III, 362.
- and Harrison, F., nature of bladder responses following stimulation of anterior hypothalamus, III, 667. See also Harrison, F.
- Wang, Y. See Kuhn, R.
- Wang, Y. L., and Harris, L. J., assessing level of human nutrition; determination of vitamin-B₁ in urine by the thiochrome method, III, 920. See also Westphal, U.
- Wangensteen, O. H., and Rea, C. E., distension factor in simple intestinal obstruction, III, 690.
- Wangermez, C. See Jeanneney, G.
- Wanick, H., liver and thyroid disturbances as symptoms of welders' disease, III, 783.
- Wankmuller, R., action of posterior pituitary extract depots in diabetes insipidus, III, 907.
- Wannier, G. See Extermann, R.
- Wannier, G. H., melting as an order-disorder transition, I, 552.
- Wannow, H. A., determination of coagulation, I, 78.
- Warburg, O., and Christian, W., protein constituent of the carbohydrate-oxidising enzyme of fermentation, III, 787.
- Ward, A. F. H., electrical conductivities of dilute solutions of sodium dodecyl sulphate in ethyl alcohol-water mixtures at 20°, I, 324.
- Ward, A. G., half-value period of ¹³N, I, 504. γ -Rays of ionium, I, 545.
- Ward, A. L., and Kurtz, S. S., jun., refraction, dispersion, and related properties of pure hydrocarbons arranged for use in the analysis of hydrocarbon mixtures, I, 10.
- Ward, E. D. See Petrie, A. H. K.
- Ward, E. M. See Elphinstone, J. J., and Page, A. P. M.
- Ward, S. M. See Rivers, T. M.
- Ward, T. See Garner, W. E.
- Wardlaw, C. W., and Leonard, E. R., tropical fruits. IV. Investigating respiration with special reference to the banana, III, 801.
- Wardlaw, W. See Cox, E. G., and Dothie, H. J.
- Ware, (Miss) E., hydantoins. LII. Synthesis of *N*-3-phenyl-5-*p*-hydroxybenzylhydantoin-*N*-1-acetic acid from tyrosine-*N*-acetic acid, II, 37.
- Ware, H. H., Main, R. J., and Taliaferro, I., duration of excretion of gonadotropic substance after delivery of near-term abdominal pregnancy with retained placenta, III, 58.
- Ware, L. L. See Heywood, B. J., and King, H.
- Ware, V. W. See Norris, J. F.
- Warembourg, H., hyperglycemia in the diagnosis, prognosis, and treatment of the diabetic, III, 12. Individual variations in fasting blood-sugar, III, 451. Sugar content and residual chromic index of blood and phlyctena fluid, III, 743. See also Bizard, G., Combemale, P., and Minet, J.
- Warhurst, E., modified form of "life period" method applied to reaction of sodium vapour with bromobenzene, I, 422. See also Evans, M. G.
- Waring, J. I., placental globulin in the modification of measles, III, 83. Nutritional heart disease in children, III, 1031.
- Waring, J. J. See Ravin, A.
- Wark, I. W., preparation of grease-free polished surfaces, I, 493.
- Warkany, J. See Nelson, R. C.
- Warnecke, H. See Weitz, W.
- Warnecke, R., and Lortie, (Mlle.) M., secondary emission of beryllium, I, 168.
- Warner, E. D., plasma-prothrombin: effect of partial hepatectomy, III, 450.
- Brinkhous, K. M., and Smith, H. P., plasma-prothrombin levels in various vertebrates, III, 648. Prothrombin conversion rate in various species, III, 892. See also Brinkhous, K. M., Scanlon, G. H., and Seegers, W. H.
- Warner, E. F. See Mitchell, H. H.
- Warner, J. C. See Eagle, S., and Winstrom, L. O.
- Warner, (Miss) R. See Young, W. G.
- Warner, W. P. See Graham, D.
- Warren, A. E., limb developments in *Rana sylvatica* following unilateral eye extirpation, III, 1022.
- Warren, B. E. See Morgan, J., and Murray, G. E.
- Warren, C. B. M., alveolar air on Mount Everest, III, 899.
- Warren, D. C., physiology and genetics of crooked keels in chickens, III, 155. See also Scott, H. M.
- Warren, D. M. See Butler, W. J.
- Warren, Frank L. See Baddar, F. G., and Schonberg, A.
- Warren, Frederick L., action of endosuccinic acids derived from polycyclic hydrocarbons on the red blood corpuscles of the mouse, II, 160; III, 350. Determination of iron in lymph glands of mice during treatment with a carcinogenic compound, III, 697.
- Warren, H., production and utilisation of light, III, 837.
- Warren, Herbert, Kuonen, D., and Baas-Becking, L. G. M., relation between internal and external medium in *Artemia salina* (L.), var. *principalis*, Simon, III, 68.
- Warren, H. A., Pijoan, M., and Emery, E. S., ascorbic acid requirements in patients with peptic ulcer, III, 914.
- Warren, J., Street, J. A., and Stokinger, H. E., influence of sulphanilamide and related compounds on oxidation-reduction potentials of haemolytic streptococcus, III, 927.
- Warren, L. A. See Tate, F. G. H.
- Warren, L. H. See Schwartz, L.
- Warren, R., technique for study of gastric absorption in man, III, 1058.
- Warren, S., medico-legal aspects of diabetes mellitus and hyperinsulinism, III, 380. See also Fogg, L. C., and Pinkerton, H.
- Warren, S. L. See Keutmann, E. H.
- Warren, W. H. See Dorn, H. W.
- Warsberg, A. von. See Feitelberg, S.
- Warsshaw, R. See Koster, H.
- Wartenberg, H. von, copper fluorides, I, 426. Surface skin formation between a hot liquid and a cold wall, I, 467.
- Wartman, W. B., jun. See Burger, A.
- Wartman, W. R. See Ingraham, E. S.
- Warwick, M. H. See Noble, R. L.
- Was, D. A., electrical conductivity, light transmission, and structure of thin gold films, I, 307. Relation of true structure of thin gold films to structure as shown by electron diffraction, I, 307.
- Wasano, T., developmental anomaly of the olfactory region in arhinencephalus in a 14-day chick embryo, III, 1044.

- Wasastjerna, J. A., structure of solid solutions, I, 412.
- Washburn, A. H. See Maresh, M. M.
- Washburn, E. R., Beguin, A. E., and Beckord, O. C., ternary system: ethyl alcohol, toluene, and water at 25°, I, 473.
- Washburn, L. E., fasting energy metabolism during lactation, III, 404.
- Brody, S., and Ragsdale, A. C., influence of fasting and refeeding on milk production, heat production, and respiratory quotient, III, 606.
- See also Ritzman, E. G.
- Washnock, J. jun. See Worrall, D. E.
- Wasmuth, W. See Ackermann, D.
- Wasserburger, K., and Smereker, H., dose distribution during the application of radium to cancer of the cervix uteri, III, 319.
- Wasserman, E. S., and Mikluchin, G. P., chemiluminescence of hydrazides of carboxylic acids, II, 425.
- Wasserman, P., and Epstein, J. W., congenital carcinoma of thymus with extensive generalised metastases, III, 975.
- Wasserman, P. B. See Young, A. M.
- Wassermann, A. See Benford, G. A., Ingold, E. H., Kaufmann, H., and Khambata, B. S.
- Wassermann, F., mechanism of mitosis, III, 445.
- Wassermann, P. See Abramson, D. I.
- Wassermann, S., and Weber, H., angina pectoris and blood pressure regulation, III, 966.
- Wataghin, G., quantum theory and origin of swarms of cosmic rays, I, 5.
- Watanabe, A., dimorphism of α -bromoiso-valerylcarbamide, II, 410. Kinetics of thermal decomposition of vitamin-hydrochloride in aqueous solution. I, III, 920.
- Watanabe, Hikosuke. See Tomita, M.
- Watanabe, Hisasi. See Masima, M.
- Watanabe, I., studies on *Bacillus pertussis*. I. Experimental whooping cough. II. Toxic substance of *B. pertussis*. III. Comparative study of *B. pertussis*, animal type *B. pertussis*, and *B. bronchisepticus*, III, 526. Influence of vitamins on glycogen content of damaged liver, III, 594. Antitoxic immunity produced by intravenous injection of diphtheria toxoid and tetanus toxin into hens, III, 726.
- Watanabe, M., innervation of the glomus aorticum and paraganglion (Palm), III, 471.
- Watanabe, Satosi, deviation of light atomic nuclei from the Hartree oscillator model, I, 297. Use of thermodynamic conception for the normal state of the atomic nucleus, I, 547.
- Watanabe, Shigeya, cultivation and antigenicity of Ducrey's bacillus, III, 629.
- Watanabe, T., exchange of water and proteins through the capillaries of the paralysed extremity in patients with hemiplegia, III, 563. Nervous influence on exchange of gases and substances through the capillaries. I and II, III, 563.
- Watanabe, Tokunosuke, kotoite, a new rock-forming magnesium borate, I, 285.
- See also Nitta, I.
- Waterman, A. J., development of the inner ear rudiment of rabbit embryo in a foreign environment, III, 542.
- Waterman, H. C., preparation of hardened embedding paraffins having low m.p., III, 545.
- Waterman, H. J., and Leendertse, J. J., destructive hydrogenation and destruction of hexadecane, II, 465.
- Leendertse, J. J., and Cranendonk, A. C., hydrogenation of anthracene and resultant products, II, 103.
- Waterman, L., muscular activity of hypophysectomised rats, III, 136.
- See also Kok, D. J., and Mijndieff, C. J.
- Waterman, N., polarographic detection of the carcinogenic activity of hydrocarbons, III, 846.
- Waters, D. E. See Murray, M. J.
- Waters, E. T. See Fletcher, J. P., and Young, F. G.
- Waters, N. F., body weight, egg weight, sexual maturity, and growth rate in the domestic fowl, III, 69.
- Waters, P. C. See Becker, E. R.
- Waters, W. A., new synthesis of aromatic arsenic compounds, II, 130. Decomposition reactions of aromatic diazo-compounds. VI. Reactions of benzene-diazonium chloride with metals, II, 310.
- Watkins, A. L., cerebrospinal fluid in optic neuritis, "toxic amblyopia," and tumours producing central scotomas, III, 573.
- Watkins, C. H. See Shreve, R. N.
- Watkins, G. M. See Greathouse, G. A.
- Watkyn-Thomas, F. W., internal-ear deafness, III, 574.
- Watremez. See Martin, P. E.
- Watrous, R. M., dermatitis from industrial contact with nicotinic acid, III, 783.
- Watson, A. C. See Winstead, J. A.
- Watson, B. P., Smith, Philip E., and Kurzrok, R., relation of the pituitary gland to the menopause, III, 480.
- Watson, C. J., urinary pigments in four cases of alcoholic pellagra, III, 402. Haemolytic jaundice with macrocytic anaemia, III, 650.
- Vigness, I., and Spink, W. W., relation of methaemoglobin to cyanosis observed after sulphanilamide administration, III, 1084.
- Watson, D. J., and Norman, A. G., photosynthesis in the ear of barley: movement of nitrogen into the ear, III, 1017.
- Selman, I. W., comparative physiology of sugar beet and mangold with respect to growth and sugar accumulation. II, III, 339.
- Watson, E. M. See McArthur, C. S.
- Watson, F. See O'Shaughnessy, L.
- Watson, F. G., jun., mean chemical composition of meteoritic accretion, I, 628.
- Watson, H. B. See Bonner, T. G., Evans, D. P., Fishburn, A. G., and Gordon, J. J.
- Watson, R. See Petrie, A. H. K.
- Watson, R. E. See Bartlett, J. H., jun.
- Watson, R. F. See Stewart, H. J.
- Watson, S. H., and Kibler, C. S., role of allergy in bronchiectasis, III, 898.
- Watson, W. N., methods of fire-making used by early man, I, 225, 434.
- Watson, W. W., spectrum of lead hydride, I, 118.
- and Simon, R., spectrum of tin hydride at high pressure, I, 238.
- Watt, G. W., reactions in the thiazole series. II. Reaction of 1-chlorobenzthiazole with thiocarbamide in aqueous media, II, 563.
- and Fernelius, W. C., action of liquid ammonia solutions of sodium, potassium, and potassium amide on bismuth oxydide, I, 483. Reduction of metal oxides in liquid ammonia, I, 574.
- Watt, J. M., treatment of allergic headache, III, 92.
- Watterott, A. See Reiners, H.
- Watters, A. J., Hockett, R. C., and Hudson, C. S., action of triphenylmethyl chloride on α -methyl-D-mannopyranoside, II, 407.
- Watterson, D. J., and Macdonald, R., mechanism of the cardiazol convulsion, III, 672.
- See also Denysen, J. A. F.
- Watts, C. E. See Shea, F.
- Watts, S. S. See Chalklin, F. C.
- Wauchope, G. M., and Leslie-Smith, M., macrocytic anaemia of achrestic type, III, 115.
- Wauer, H., respiratory apparatus of *Lepus timidus*, III, 224.
- Waugh, J. G. See Smith, Charles Linton.
- Waugh, T. R. See McEuen, C. S.
- Wawro, N. W. See Weinstein, L.
- Wawrzik, F., juvenile tabo-parcisis in siblings, III, 670.
- Wawzonek, S. See Smith, L. I., and Webb, T. J.
- Way, E. L. See Oneto, J. F.
- Way, (Miss) K., liquid-drop model and nuclear moments, I, 400. Binding energies of ^3H and ^3He , I, 595.
- Waymouth, C., Thorneley, P. C., and Taylor, W. H., X-ray examination of mordenite (ptilolite), I, 48.
- Weatherburn, A. S. See Ardagh, E. G. R.
- Weatherby, J. H., and Williams, G. Z., toxicity of diethylene glycol, elixir of sulphanilamide-Massengill, and a synthetic elixir, III, 416.
- Weatherford, H. L., morphological and experimental study of intranuclear crystals in hepatic cells of the dog, III, 444. Intranuclear crystals in the hepatic cells of Canidae—wolves, foxes, jackals, and non-domestic dogs, III, 445.
- Weatherhead, (Miss) A. P. See Kermack, W. O.
- Weaver, C. See Price, C. C.
- Weaver, G. A., jun. See Bond, P. A.
- Weaver, K. S., and Hussong, H. E., colour temperature-candlepower characteristic of tungsten lamps, I, 280.
- Webb, D. A., strontium in sea-water and its effect on calcium determinations, I, 46.
- Webb, E. L. See Kitchen, S. F.
- Webb, H. W. See Merrill, H. J.
- Webb, J. H., photographic latent image from the standpoint of the modern theory of solids, I, 480.
- and Evans, C. H., failure of the photographic reciprocity law at low intensity, I, 573.
- Webb, J. S., variation in the longitudinal incremental permeability due to a superimposed circular field, I, 13.
- See also Bryant, J. M.
- Webb, K. R., and Prideaux, E. B. R., acid fluorides of the alkali metals. II. Higher acid fluorides of rubidium, and thermal diagram of the RbF-HF system, I, 145.

- Webb, R. W., new occurrence of alurgite from California, I, 284. Largo sphene crystals from San Jacinto mountains, California, I, 500.
- Webb, T. J., spectrophotometric examination of blood from animals receiving sulphanilamide, III, 773.
- Smith, L. I., Bastedo, W. A., jun., Ungnade, H. E., Pritchard, W. W., Hoehn, H. H., Wawzonek, S., Opie, J. W., and Austin, F. L., vitamin-B. XIV. Absorption spectra of tocopherols, chromans, coumarans, and related compounds, II, 537.
- See also Bastedo, W. A., jun.
- Webb, W., β -brass in single crystal form, I, 193.
- Weber, A., radium content of rocks from the Hochalm-Ankogel group [Austrian Alps], I, 584.
- Weber, A. P., volumetric determination of carbonic acid in alcoholic fermentation, III, 724.
- Weber, E. See Selbach, H.
- Weber, Erich, counter tube investigations with a coincidence amplifier of variable resolving power, I, 281.
- Weber, F., power of assimilation and birefringence in the chloroplasts, III, 342. Abnormal crystals in raphide cells, III, 342.
- Weber, F. C., Hennion, G. F., and Vogt, R. R., halogenation in reactive solvents. II. Addition of halogen and acetoxyl to ethylene, II, 399.
- See also Tolstoi, E.
- Weber, F. P., transient pulmonary infiltration, with blood eosinophilia (Loeffler's syndrome), III, 812.
- and Huber, H., familial occurrence of thromboangiitis obliterans, III, 363.
- Weber, G., relationship between vitamins and bone marrow, III, 1024.
- and Kemkes, B., chemotherapeutic action of taurocholate, III, 859.
- Weber, H., vitamin-C metabolism in pulmonary tuberculosis, III, 167.
- See also Wassermann, S.
- Weber, H. H., muscle-proteins and the properties of muscle, III, 242. Protein molecule, III, 785.
- Weber, H. M. See Erlenmeyer, H.
- Weber, Janet, Irwin, M. H., and Steenbock, H., vitamin-E destruction by rancid fats, III, 769.
- See also Irwin, M. H., and Lease, E. J.
- Weber, Josef, pneumotachograms in different postures, III, 661.
- See also Jansen, W. H.
- Weber, K., and Mautner, V., action of inhibitors on photochemical autooxidation of iodoform, I, 89.
- and Valiö, R., inhibition phenomena in the catalysed oxidation of iodide ion by chlorate. II. Ruthenium chloride as catalyst, I, 528.
- Weber, M. K. See Culbertson, J. L.
- Weber, N. A., sting of the ant *Paraponera clavata*, III, 510.
- Weber, S., internal friction of gases. I. and II., I, 411.
- Weber, U. von, accurate determinations of mol. wts. by the principle of gas displacement, I, 161.
- and Rastetter, A., self-ignition of hydrocarbons on adiabatic compression, I, 268.
- Webley, D. M. See Quastel, J. H.
- Webster, A. See Fitzgerald, J. E.
- Webster, B., treatment of hypogonadism in the adolescent male, III, 143. Modifiability of growth by endocrine substances, III, 905.
- Webster, J. E., Black, R., and Cross, F. B., relation of leaf pigments and total solids content to uneven colouring in grapes, III, 800.
- See also Gardjian, E. S.
- Webster, M. D., change in amino-oxidation following dissociation of *Staphylococcus aureus*, III, 944.
- Wechsler, I. S. See Sapirstein, M. R.
- Wedd, A. M., influence of digoxin on the potassium content of heart muscle, III, 506.
- See also Blair, H. A.
- Weddell, G. See Posener, K.
- Wedeman, E., relations between medium volume and [bacterial] growth, III, 880.
- Wedemeyer, H. E., and Daur, T., polarographic serum examination in cancer diagnosis, III, 848.
- Weed, H. P. See Lushman, E. A.
- Weeden, U. See Weidenhagen, R.
- Weekers, L., Joiris, P., and Bonhomme, F., mydriasis with conjunctival application of adrenaline, III, 673.
- Weekers, R., composition of the nutritive medium for the survival of isolated crystalline lens by De Haan-Bakker technique, III, 972.
- See also Krause, A. C.
- Weeks, D. M. See Mansfield, J. S.
- Weeks, W. F. See Winder, C. V.
- Weel, P. B. von, histophysiology of small intestines, III, 147.
- and Engel, C., changes of carboxypolypeptidase content of the pancreas, III, 148.
- Weerden, W. J. van. See Terpstra, P.
- Wefelmeier, W., model of trans-uranium, I, 237.
- Wegelius, C., differences between "radio-logical" and "anatomical measurements" in determining size of foetal skull röntgenologically, III, 805.
- Weger, P. See Fleisch, A.
- Wegerif, (Fr.) E. See Ketelaar, J. A. A.
- Wegman, M. E., convulsions in hyperthermia, III, 572.
- See also Peck, E. C.
- Wegner, H. See Weidenhagen, R.
- Wégria, R. See Bogaert, L. van, Wiggers, C. J., and Williams, J. R.
- Wehr, W., ageing phenomena and molecular dimensions of chain complexes in solution. I, I, 521.
- Wehrli, M., abnormal intensity relations in the band spectrum of indium moniodide, I, 57. Electronic spectrum of selenium dibromide vapour, I, 401.
- Wehrli, S. See Romund, M. H.
- Wehrlin, H., acute poisoning with nicotine, III, 92.
- Wehrmann, O. See Balks, R.
- Wei, C. T., rust-resistance in the garden bean, III, 215.
- Weibke, F. [with Sieber, J.], preparation of lanthanum by electrolysis of its fused chloride, I, 479.
- and Hesse, E., alloys of gallium with gold, I, 251.
- See also Biltz, W., and Kubaschewski, O.
- Weichardt, W., non-specific therapy, III, 936.
- Weichselbaum, T. E., and Probst, J. G., determination of hippuric acid in urine, III, 487.
- See also Rusk, H. A.
- Weicker, B., and Bublitz, H., action of vitamin-B, and -C on X-ray leucopenia, III, 704.
- Weidenhagen, R., and Nenninger, L., β -h-fructosidase. IV., III, 625.
- and Reinacker, H., glyoxalines. VIII. Arsonophenylglyoxalines, II, 131.
- and Weeden, U., glyoxalines. VII. Iminazole compounds of the heterocyclic series, II, 39.
- and Wegner, H., hydrogenating fission of sucrose, II, 50.
- Weidenreich, F., facts and problems in the origin of mankind, III, 225.
- Weidinger, A. See Derksen, J. C.
- Weidle, H. See Abderhalden, E.
- Weidlich, H. A., and Daniels, G. H., preparation of substituted cyclopentanones. I, II, 480.
- Weidman, F. D., and Klauder, J. V., acne urtica polycythämica, III, 1026.
- Weidner, B. V., Hutchison, A. W., and Chandlee, G. C., conductivities of electrolytes in anhydrous acetic acid, I, 82.
- Weidner, K., lactoflavin and cell respiration, III, 165. Choroid plexus and cerebral circulation, III, 833. Dangers of cisternal puncture, III, 834.
- Weier, E., factors affecting reduction of silver nitrate by chloroplasts, III, 1108.
- Weigand, H., action of cardiazol on glycogen and vitamin metabolism, III, 88.
- Weigand, K. See Glusius, K.
- Weigert, F., photochemical models in photographic science, I, 272. Photochemistry of the visual spectrum, I, 481. Testing dispersion filters, I, 491.
- and Morton, J. W., photochemistry of colour vision, III, 753.
- Weihe, H. D. See Nelson, G. H.
- Weil, A., and Zondek, B., histopathology of the pituitary of the white rat injected with follicular hormone, III, 908.
- Weil, A. J., Gall, L. S., and Wiedner, S., the typhoid bacillus, III, 877.
- and Parsons, C. H., flocculative reaction of *perfringens* toxin and antitoxin, III, 1101.
- Weil, G. L., and Barkas, W. H., β -radiation of ^{76}As , I, 591.
- Weil, H., peracute myeloblastic leukaemia with symptoms of a transverse myelitis, III, 647.
- Weil, L., Kocholaty, W., and Smith, L. D., proteinases of anaerobic and aerobic micro-organisms, III, 787.
- and Russell, M. A., proteolytic activity of plasma during tumour or embryonic growth in rats, III, 71.
- Weil, P. G. See Jones, Howard W.
- Weil, R., and Hocart, R., lautite, CuAsS , I, 588.
- See also Halla, F.
- Weil-Malherbe, H., tissue glycolysis, III, 171. Formation of glucose from acetoacetic acid in rat kidney, III, 173.
- Weiland, P., harmful effects of sericite and steel-grinding dust; comparative experiments on guinea-pigs, III, 95. Complement-fixation reactions for tuberculosis in cerebrospinal fluid, III, 631.
- Weiler, F., behaviour of roots under influence of growth-substance of coleoptile tips of *Avena* and *Zea*, III, 214.
- Weiler, G., effect of barbiturates on response of amphibian muscle to electrical stimulation, III, 900.
- Weimann, K. See Skrabal, A.

- Wein, D., nerve supply of the testis, III, 688.
- Weinbach, A. P., contour maps, centre of gravity, moment of inertia, and surface area of the human body, III, 345.
- Weinberg, E., form and extent of region of indistinct vision in quick forward motion, III, 904.
- Weinberg, E. D., dead (ox) fascial grafts in tendon defects, III, 244.
- Weinberg, M., and Guillaumie, M., titration of anti-*cadematiens* sera, III, 204.
- Weinberg, T. See Klein, S. H.
- Weinbrenn, C., osmotic values of the leaf saps of certain South African high-veld grasses, III, 1108.
- Weinbrenner, H. See May, F.
- Weiner, D. O. See Elman, R.
- Weiner, N. See Hershberg, E. B., and Michael, A.
- Weiner, P. See Simon, Alexander.
- Weiner, S. B., and Reiner, M., icteric index in newborn, III, 1029.
- See also Denzer, B. S., and Reiner, M.
- Weinert, W., and Fünfsgeld, E., clinical significance of the Lehmann-Facijs brain-lipin test, III, 374.
- Weinmayr, V. See Calcott, W. S.
- Weinstein, F. M. See Poljakov, M. V.
- Weinstein, J., and Mattikow, B., angina pectoris in spontaneous hypoglycemia, III, 656.
- Weinstein, L., effect of oestrogenic hormone and ovariectomy on normal antibody content of the serum of mature rabbits, III, 685.
- Wawro, N. W., Worthington, R. V., and Allen, E., influence of oestrogenic hormone on the p_H and bacterial flora of the vagina of the immature monkey, III, 145.
- Weinstein, M. L., and Rovner, L., Geiger-Müller counter, III, 96.
- Weinstein, R. C., anterior pituitary growth factor and blood-sugar, III, 1046.
- Weinstein, W. See Katz, L. N.
- Weinstock, H. H., jun., Mitchell, H. K., Pratt, E. F., and Williams, Roger J., pantothenic acid. IV. Formation of β -alanine by cleavage, II, 461.
- See also Fuson, R. C., and Williams, Roger J.
- Weintraub, D. H. See Neter, E.
- Weintraub, R. L., assay of growth-promoting substances utilising straight growth of the *Avena* coleoptile, III, 535.
- See also Johnston, E. S., and Reid, M. E.
- Weir, D. R., polyarteritis nodosa, III, 660.
- Weir, E. G., and Hastings, A. B., distribution of bromide and chloride in tissues and body fluids, III, 916.
- Weir, J. B. De V. See Bell, G. H.
- Weir, J. F., liver damage without jaundice, III, 759.
- Weis, W. See Konzett, H.
- Weisbach, M. W. See Stahl, R.
- Weisberger, D., Young, A. P., and Morse, F. W., jun., ascorbic acid blood levels in dental patients, III, 168.
- Weisblat, D. I. See Wolfrom, M. L.
- Weise, J. See Neunhoeffer, O.
- Weise, R., illuminated wedge as an illumination accessory for high microscopic magnification, I, 103.
- Weiser, R. S., and Knott, H., influence of prolonged etherisation, trauma, and hemorrhage on survival period of adrenalectomised rats, III, 1050.
- Weisfeldt, L. A. See Mossman, H. W.
- Weisinger, I. See Doby, T.
- Weisman, A. I., continued response to therapy of a neglected case of thyro-pituitary disease, III, 578.
- Weiss, A. See Lerche, E.
- Weiss, C., and Westmeyer, H., production of neutrons, I, 492.
- Weiss, F. T. See Biale, J. B.
- Weiss, G., determination of porphyrin with the selenium photo-cell, III, 886.
- Weiss, H. A. See Owen, S. E.
- Weiss, J., photosensitised reactions and quenching of fluorescence in solution, I, 88.
- Oxidation and chemiluminescence, I, 125.
- Weiss, K. See Diemair, W.
- Weiss, L. C. See Stone, H. W.
- Weiss, M. See Tarbell, D. S.
- Weiss, M. M., early rise of blood pressure in coronary thrombosis, III, 560.
- Weiss, O. L., action of testosterone in senile psychoses, III, 385.
- Weiss, P., counter tube amplifier with optional amplification factor, I, 160.
- Counter tube amplifiers, I, 160.
- Weiss, S. See Kunkel, P., Muus, J., Rawls, W. B., and Wilkins, R. W.
- Weiss, T. See Butenandt, A.
- Weissberger, A. See James, T. H., Kornfeld, G., and Snell, J. M.
- Weisschedel, E., and Jung, R., significance of secondary degeneration of fibres after localised subcortical electro-coagulation, III, 1023.
- Weissenbach, R. J., and Temime, P., use of sulphonamides and their derivatives in treatment of gonococcal rheumatism, III, 927.
- Weissenborn, K. See Langenbeck, W.
- Weisskopf, V. F., self-energy and electromagnetic field of the electron, I, 507.
- Weissman, S. I. See Freed, S.
- Weisz, P., mesotron and directional distribution of cosmic rays, I, 236, 445.
- Zenith angle distribution of the hard component of cosmic rays and the mass of the mesotron, I, 445.
- Weisz, S. See Nive, E. O.
- Weitnauer, G. See Barger, G.
- Weitz, W., a chronic myeloid leukaemia observed from the onset, III, 4.
- and Warnecke, H., changes in electrocardiogram and cardiac filling, III, 655.
- Weitzmann, G., effect of pleural and peritoneal exudates on tissue cultures, III, 68.
- Culture of human malignant tumours *in vitro*, III, 157.
- Weitzmann, A. See Bergmann, E.
- Weitzmann, C., and Bergmann, E., 1:4:9:10-tetraphenylanthracene, II, 206.
- Bergmann, E., and Haskelberg, L., phenylated phthalic acids and anthracene derivatives, II, 219.
- Bergmann, E., and Hirshberg, Y., hydrolytic deamination of amino-acids, III, 786.
- and Bergmann, F., interaction between Grignard compounds and maleic acid derivatives, II, 22.
- Haskelberg, L., and Berlin, T., boric acid synthesis of *per*-hydroxyanthraquinones, II, 219.
- and Rosenfeld, B., specific nutritive requirements of *Clostridium acetobutylicum* (Weitzmann). II, III, 942.
- Weizsäcker, C. F. von, model of trans-uranium, I, 237, 352.
- Welch, A. J. E., chemistry of boron hydrides. I. Structure of boron hydrides. II. Reactions of diborane and derivatives, I, 622.
- See also Dothie, H. J.
- Welch, A. de M., and Welch, M. S., lipotropic action of compounds related to choline chloride, III, 311.
- See also Welch, M. S.
- Welch, C. S., and Comfort, M. W., value of the acid test meal; study of normal persons and of persons with duodenal ulcers, III, 1058.
- See also Clark, B. B.
- Welch, H., Borman, E. K., and Mickle, F. L., diagnostic antipneumococcus serum, III, 331.
- Wentworth, J. A., and Mickle, F. L., use of sulphanilamide in diagnosis and treatment of brucellosis, III, 81.
- Welch, J. See Moore, C. V.
- Welch, M. S., and Welch, A. de M., relation between size of dose and lipotropic effect of choline chloride in mice, III, 311.
- See also Welch, A. de M.
- Welch, R. B. See Reuter, F.
- Welcker, A., specific antitoxins in the blood-serum of dysentery convalescents, III, 203.
- Welcker, E. R., effect of obstruction of the vas deferens on testis and epididymis, III, 591.
- Weldon, L. H. P. See Hobden, F. W.
- Welke, K. See Pohle, K.
- Welker, H., model of the superconductor based on electron theory, I, 132.
- Welker, W. H. See Hecht, R.
- Weller, G. See Binet, L.
- Weller, H. See Schultze, G. R.
- Weller, W. T. See Kon, G. A. R.
- Wellman, B. See Rawdon-Smith, A. F.
- Wellmann, O. See Marek, J.
- Wells, A. F., crystal structure of palladium chloride, $PdCl_2$, I, 305.
- See also Chatt, J.
- Wells, A. H. See Ralston, M. B.
- Wells, A. J. See Crawford, B. L., jun.
- Wells, C. See Rhines, F. N.
- Wells, F. G., origin of the iron ore deposits in the Bull Valley and Iron Springs Districts, Utah, I, 108.
- Wells, H. E. See Dunlop, G.
- Wells, J. A., and Greene, R. R., cortinomimetic activity of various sterols, III, 977.
- See also Greene, R. R.
- Wells, J. R. See Pillemer, L.
- Wells, L. J., and Overholser, M. D., sperm formation and growth of accessory reproductive organs in hypophysectomised ground squirrels in response to substances from blood and human urine, III, 591.
- Wells, L. S. See Flint, E. P.
- Wells, M. W. See Wells, W. F.
- Wells, R. C., geochemistry, I, 106.
- Wells, W. F., and Wells, M. W., measurement of sanitary ventilation, III, 94.
- Wells, M. W., and Mudd, S., infection of air; bacteriologic and epidemiologic factors, III, 1006.
- Wels, P., irradiated cell nucleus, III, 96.
- Stimulating action of light, III, 783.
- Welsch, A., high-precision calorimeter, I, 42.
- Welsch, M., effect of reaction of medium on production, activity, and stability of the bacteriolysins of *Actinomyces*, III, 791.
- Nephelometric study of mycolysis; effect of reaction of the medium on turbidity of bacterial suspensions, III, 797.
- Welsh, J. H., chemical mediation in crustaceans. I. Occurrence of acetylcholine in nervous tissues and its action on decapod heart, III, 1039.

- Welsh, H., action of eye-stalk extracts on retinal pigment migration in crayfish, *Cambarus bartoni*, III, 1043.
and Chace, F. A., jun., eyes of deep-sea crustaceans. II. Sergestidae, III, 254.
- Welti, H. See Laurent-Gérard, J. P.
- Welton, R. C., and King, G. B., system calcium selenate-ammonium selenate-water at 30°, I, 372.
- Wendel, W. B., methæmoglobin determination; clinical method, III, 8. Control of methæmoglobinæmia with methylene-blue [after sulphanilamide], III, 502.
- Wender, L., and Epstein, M. D., reticulo-endothelial disturbances during metrazol treatment, III, 832.
- Wenderoth, H. See Fischer, Hans.
- Wendt, G. See Kuhn, R.
- Wendt, G. von, vitamin-C content of cow's milk, III, 168.
- Wendt, G. R. See Child, I. L.
- Wendt, H. See Altenburger, E., and Pies, R.
- Wendt, S. See Waldenstrom, J.
- Wengen, H. C. a, ætiology of paroxysmal paralysis, III, 663.
- Wenger, L. J. See Tuft, L.
- Wenger, P. See Cimmerman, C.
- Wenger, W. J., influence of ultra-violet rays on bactericidal power of blood, III, 209.
- Wenig, K. See Neßpor, B.
- Wenk, P., dosimetry in short-wave therapy, III, 318, 717.
- Wenner, R., experiences with Samuels' "cycloscopy" [cyclic changes in reduction time of oxyhæmoglobin], III, 381.
and Joel, K., experiences with female sex hormones, III, 913.
- Wense, T., oxidation of adrenaline by succinic acid; inhibition by cocaine and sparteine, II, 420. Occurrence and mode of action of adrenaline and acetylcholine in *Paramecium caudatum*, III, 505. Peroxide content of acetaldehyde and inactivation of adrenaline, III, 911. Substance resembling adrenaline in broom, III, 1019.
- Wensel, H. T., international temperature scale and related physical constants, I, 420.
- Wenstop, K. See Erbring, H.
- Went, F. W., specific factors other than auxin affecting growth and root formation, III, 215.
- Went, S., and Martin, Janos, anaphylaxis in white rat, III, 866.
- Wentrup, H., and Hieber, G., equilibrium between oxygen and titanium in iron melts, I, 524.
- Wentworth, J. A. See Welch, H.
- Wentz, W., treatment of rickets with vitamin-D₂, III, 497.
- Wentzel, G., angular spread of hard cosmic-ray showers, I, 55.
- Wenusch, A., effect of press-juice from tobacco stalks on sucrose, III, 536.
and Scholler, R., hydrolysis of sucrose by press juice of branches, veins, and stems of the tobacco plant, III, 423.
- Wepler, W., general hypoplasia of the skin, III, 279.
See also Krong, F.
- Werder, F. von, dihydrotachysterol, I, 421.
and Jung, F., synthesis of chromones, II, 82.
Moll, T., and Jung, F., specificity of vitamin-E action, II, 174.
- Wergeland, H. See Euler, H., and Flood, H.
- Wergin, W. See Hess, K.
- Werker, W., crystal structure of Rb₂SnI₆ and Cs₂SnI₆, I, 244.
- Werkman, C. H. See Brewer, C. R., Mickelson, M. N., Reynolds, H., Silverman, M., and Wiggert, W. P.
- Werle, E., and Grunz, M., substance Dk which contracts the intestine, stimulates the uterus, and lowers blood pressure, III, 1033.
and Heitzer, K., histidine carboxylase, III, 322.
and Lentzen, T., influence of vasoactive substances on injection anæsthesia, III, 933.
and Roden, P. von, occurrence of callicrein in salivary glands and saliva. II. Substance from dog's submaxillary gland which increases blood pressure, III, 967.
- Werle, P. P. See Francis, C. C.
- Werner, A., volumetric determination of sulphur by Carius' method, I, 276.
See also Weygand, C.
- Werner, A. A., severe reactions from use of lactogenic hormone, III, 259. Male climacteric, III, 1057.
- Werner, A. B. A., estimation of sulphanilamide in biological fluids, III, 303.
- Werner, C. F., relation of utricle, sacculus, and ductus endolymphaticus, III, 255.
- Werner, E., relationship between ascorbic acid and residual nitrogen and plasma-protein; clinical significance in pregnancy, III, 604.
- Werner, G. See Parhon, C. I.
- Werner, H., binocular depth contrast and the conditions of the binocular field, III, 133.
- Werner, Henry. See Kleinzeller, A.
- Werner, H. W., and Tatum, A. L., comparative study of the stimulant analeptics picrotoxin, metrazol, and coramine, III, 864.
- Werner, J., m.p. outfit, I, 103. Filling closed-end mercury manometers, I, 104.
and Bogert, M. T., synthesis from thujaketone of new hydroterpenoids, II, 141.
- Werner, M. See Bigler, J. A., and Peacock, S.
- Werner, M. F. See Kolmer, J. A.
- Werner, R. C. See Baker, E. M.
- Werner, S., simple Knudsen manometer, I, 224.
- Werner, S. C., failure of gonadotropic function of rat hypophysis during chronic inanition, III, 1045.
- Wernicke, R., oligochemical factors which influence the formation of gold sols by Zsigmondy's method, I, 563.
and Mendive, J., effect of contact with the atmosphere on properties of water employed in preparation of gold sols by Zsigmondy's method, I, 563.
- Wertheimer, D., Pillemer, L., Lawson, J., and Ecker, E. E., phospholipins and [blood] complement activity, III, 232.
- Wertheimer, E. See Stein, L.
- Werthessen, N. T. See Friedmann, E., and Pincus, G.
- Wertz, A. See Meyer, A. E.
- Wertz, J. E. See Crist, R. H.
- Werz, R. von, action of local anæsthetics, III, 187. Urinary disinfectant action of mandelic acid, III, 1085.
and Verleger, R., evaluation of sedative effects, III, 862.
- Weselmann, H. See Westphal, K.
- Weslaw, W., and Wróblewski, B., vitamin-A-thyroxine antagonism. I, III, 702.
- Wespi, H., autonomic functions in insulin shock treatment of schizophrenic patients, III, 131.
- Wesselhoeft, C., and Smith, E. C., use of sulphanilamide in scarlet fever, III, 502.
Smith, E. C., and Branch, C. F., human encephalitis, III, 335.
- Wessely, F., and Kleedorfer, A., isomeric $\gamma\delta$ -di-*p*-hydroxyphenyl- Δ^{β} -*n*-hexenes, II, 503.
and Prillinger, F., isoflavans. I. Catalytic hydrogenation of isoflavones, II, 124. Constitution of equol, II, 222.
and Wang, S., occurrence of adonitol [in plants], III, 438.
See also Kerschbaum, E.
- Wessler, S., and French, C. S., photo-synthetic quotient H₂/CO₂ for *Streptococcus varians*, III, 795.
- West, C. See Zilva, S. S.
- West, D. W. See Levy, L.
- West, E., MacInnes, A. S., McCarthy, J. L., and Hibbert, H., occurrence of syringyl radical in plant products, III, 1019.
- West, E. J. See Cutts, M.
- West, E. S. See Osgood, E. E., and Todd, W. R.
- West, P. M., and Wilson, P. W., relation of "co-enzyme R" to biotin, III, 873.
See also Laird, D. G.
- West, P. W. See Foley, F. C.
- West, R. See Dakin, H. D.
- West, R. A., effect of quinine on auditory nerve, III, 375.
- West, T. F. See Goodway, N. F.
- West, W., influence of temperature and pressure on infra-red absorption spectrum of gaseous and liquid hydrogen chloride up to the critical state, I, 549.
- Westcott, F. H., and Wright, L. S., tobacco allergy and thromboangitis obliterans, III, 21.
- Westenbrink, H. G. K., biological aspects of protein chemistry, III, 622. Determination of vitamin-B₁, III, 766. Methods of determination of vitamin-B₁ and their application in physiology and medicine, III, 920.
and Jansen, B. C. P., determination of cocarboxylase and ancurin by the thiochrome method. I and II, III, 287.
See also Goudsmit, J.
- Westenhoef, O. See Robbers, H.
- Westerdijk, T. See Poll, J. van de.
- Westerfeld, W. W., Thayer, S. A., MacCorquodale, D. W., and Doisy, E. A., ketonic oestrogen of sow ovaries, III, 55. Theelin from human placenta, III, 55.
- Westerfield, E. C., thermal dilation of superconductors, I, 191.
and Pietenpol, W. B., viscosity in an expanding bubble, I, 192.
- Westerhof, F. See Clay, J.
- Westerkamp, R. F. See De Jong, H. G. B.
- Westerlund, E., action of adrenal cortex on the lipin curve in Addison's disease, III, 912.
- Westfall, B. B. See Richards, A. N.
- Westheimer, F. H., electrostatic effect of substituents on dissociation constants of organic acids. IV. Aromatic acids, I, 523.
and Shookhoff, M. W., electrostatic effect of substituents on dissociation constants of organic acids. III, I, 263.
See also Kirkwood, J. G.

- Westman, A., and Jacobsohn, D., hypophyseal changes after castration and after treatment with oestrin in rats with severed hypophyseal stalk, III, 575. Ovarian reaction after prolan treatment in rats with severed hypophyseal stalk, III, 576. Luteinising effect of oestrin in rats with severed hypophyseal stalk, III, 583.
- Westmeyer, H. See Weiss, C.
- Weston, A. W., and Suter, C. M., reaction of chlorosulphonic acid with acetophenone; synthesis of a cyclic ketosulphone, II, 162. Reaction of *p*-fluorophenol with benzene and aluminium chloride, II, 502.
- See also Suter, C. M.
- Weston, H. C., and Stroud, E., lighting of cinema auditoriums for visibility and safety, III, 837.
- Weston, J. K., distribution of ganglion cells and fibres related to the sacculle and the basal coil of the cochlea, III, 255. Comparative anatomy of the ganglion cells associated with the vertebrate inner ear sensory areas, III, 473. Comparative anatomy of the sensory areas of the vertebrate inner ear, III, 753.
- Westphal, K., and Koch, K., action of digitalis on lipins, III, 712.
- and Weselmann, H., toxic action of nicotine on stomach, III, 1004.
- See also Kuhn, R.
- Westphal, O. See Kuhn, R.
- Westphal, P., application of chromatography to fractionation of allergic active pollen extracts, III, 417.
- Westphal, U., colour reaction of Tortolli and Jaffe, II, 366.
- Wang, Y. L., and Hellmann, H., 17-chloro-derivatives of the testicular hormone and their transformation products, II, 368.
- See also Buxton, C. L.
- Westwater, J. O., Stiven, D., and Garry, R. C., serum-sodium level in tuberculous patients, III, 819.
- Westwood, J. V. See Hickling, A.
- Wetcler, B. B. See Chesley, L. C.
- Wétroff, G., reactions with chlorine of derivatives of the phosphonitrile radical, I, 273. Equilibrium $2P_2$ in phosphorus vapour, I, 323.
- See also Moureu, H.
- Wetter, F. See Bock, F.
- Wetterdal, P., painless confinements, III, 778.
- Wetterer, E., the induction tachograph; a new method for blood flow measurement on unopened vessels, III, 124.
- See also Deppe, B.
- Wettstein, A., phytochemical hydrogenation of oestrone to α -oestradiol, II, 157.
- See also Miescher, K.
- Wetzel, G., and Kiesselbach, A., heating tissues by short waves, III, 717.
- Wetzel, L., complete heart block and patent inter-ventricular septum, III, 745.
- Wetzel, R. See Bothe, W.
- Wetzel, U., blood volume and blood transfusions, III, 650.
- Wetzel, W. [with Wirtz, D.], is a thermal hypothesis of flint formation possible? I, 346.
- Wetzler-Ligeti, C. See Csato, T.
- Weurman, C. See Nicolai, M. F. E.
- Weygand, C., possible significance of the natural polymorphic system, I, 552.
- and Gabler, R., effect of molecular structure on occurrence of liquid crystals, I, 130.
- Weygand, C., and Gabler, R., thermal persistence of crystalline liquid phases, II, 16. Ethylenic isomerisation. IV. Stereoisomeric and chromoisomeric nitro- and amino-stilbenes, II, 56.
- and Werner, A., micro-analytical determination of halogens, I, 213. Regulation of catalytic reduction of unsaturated compounds and the ageing phenomena of platinum contacts, II, 68.
- Weygand, P. See Kuhn, R.
- Weygand, C. M. See Hirschfelder, J. O.
- Weyl, R., development of the volcanism of the "rotliegenden" formation in the Black Forest, I, 287.
- Weyl, W. See Tscheischwili, L.
- Weyler, H. See Dustin, C. C.
- Weyrauch, L. See Keil, W.
- Wezel, H., action of diisoptal on growth of gonococci in Neumann cultures, III, 177.
- Wezler, K., and Boger, A., dynamics of arterial system; arterial blood pressure and its components, III, 361. Assay of vasomotor substances, III, 561.
- and Greven, K., origin of dicrotic pulse wave, III, 659.
- and Knebel, R., time course of circulatory changes during Valsalva's experiment, III, 557.
- See also Boger, A.
- Wharton, R. E. See Todd, T. W.
- Wheat, T. G. See Smith, G. B. L.
- Wheatley, M. A. See Levine, S. Z.
- Wheeler, A., relative adsorbabilities of hydrogen and deuterium, I, 21.
- See also Beek, O.
- Wheeler, C. H. See Stewart, H. J.
- Wheeler, D. H. See Riemenschneider, R. W.
- Wheeler, J. A., and Lamb, W. E., jun., influence of atomic electrons on radiation and pair production, I, 352.
- See also Bohr, N.
- Wheeler, K. M., Gallagher, H. J., and Stuart, C. A., unusual case of [red cell] autoagglutination, III, 893.
- Wheeler, P. A. See Probst, J. G.
- Wheeler, T. S. See Bhagwat, N. A., Deshmukh, G. V., Dev, S. G., Hutchins, W. A., Khanolkar, A. P., Naik, R. G., Panse, T. B., Rao, S. N., Ullal, V. V., and Virkar, V. V.
- Wheeler, W. R. See Whitmore, F. C.
- Whelon, H., and Wilson, G., corpus luteum cystoma, III, 913.
- Whetstone, J. See Haworth, W. N.
- Whidden, H. C. See Friedgood, H. B.
- Whiddington, R. See Lee, A. H.
- Whiffin, A. C. See Fenning, R. W.
- Whipple, G. H., protein production and exchange in the body including haemoglobin, plasma-protein, and cell-protein, III, 232.
- and Robscheit-Robbins, F. S., nephritis and its influence on haemoglobin production in experimental anaemia, III, 742.
- See also Hahn, P. F., and Robscheit-Robbins, F. S.
- Whistler, R. L., ring-structure in derivatives of sorbose, II, 245.
- and Underkofler, L. A., production of *l*-erythrulose by the action of *Acetobacter suboxydans* on erythritol, III, 102.
- Whiston, G. See Davis, H. H.
- Whitaker, J. S. See Whitmore, F. C.
- Whitaker, M. D., Barton, C. A., Bright, W. C., and Murphy, E. J., cross-sections of metallic uranium for slow neutrons, I, 294.
- and Beyer, H. G., transmission of slow neutrons through crystals, I, 396.
- Beyer, H. G., and Dunning, J. R., scattering of slow neutrons by paramagnetic salts, I, 4.
- Whitaker, T. W., use of the Feulgen technique with certain plant materials, III, 645.
- Whitbeck, C. G. See Cantarow, A.
- Whitby, L., chemotherapy of bacterial infections, III, 82.
- Whitcomb, S. E., and Lagemann, R. T., infra-red spectrum and molecular constants of carbon monoxide, I, 179.
- See also Thomas, L. H.
- White, A. See Beach, E. F., and White, Julius.
- White, A. C. See Lamb, I. D.
- White, A. H., hindered molecular rotation and the dielectric behaviour of condensed phases, I, 128.
- White, B. V., and Jones, C. M., rate of filtration through the capillary walls (measured by the pressure plethysmograph) in patients with intrahepatic disease, thyrotoxicosis, and myxoedema, III, 363.
- See also Jones, C. M.
- White, C. E., fluorescence analysis of inorganic materials, I, 213.
- White, E. G., liver of the pig: hepatic lobule and liver cell during post-natal growth, III, 644. Effect of carbon tetrachloride on liver of pig, with reference to experimental cirrhosis, III, 843.
- White, E. P., burette top for precise control of the rate of outflow, I, 104.
- and Robertson, P. W., kinetics of chlorine, iodine chloride, and bromine chloride addition of olefinic compounds, I, 569.
- White, F. D. See Fraser, R. H.
- White, F. R. See White, Julius.
- White, Harvey L., absence of glomerular intermittence [in kidneys] in normal dogs, III, 1060.
- and Findley, T., jun., responses of normal subjects and patients with diabetes insipidus to water and salt ingestion, III, 760.
- and Heinbecker, P., creatinine and urea clearances, responses to water ingestion, and concentrating power of kidneys in normal, diabetes insipidus, and hypophysectomised dogs, III, 153.
- White, Henry L., interaction of factors in growth of *Lemna*. XIII. Interaction of potassium and light intensity in relation to root length. XIV. Interaction of potassium and light intensity in relation to growth and assimilation, III, 339, 1016. Incidence of blotchy ripening of tomatoes, III, 635.
- White, James. See Grieve, J.
- White, Julius, McGinty, D. A., Anderson, L. P., and White, F. R., influence of desiccated thyroid, thyroid concentrate, and thyroxine on the oxygen consumption of the guinea-pig, III, 679.
- and White, A., inhibition of growth of rats by oral administration of methylcholanthrene; effects of dietary cystine and methionine supplements, III, 491.

- White, *Julius*, and White, *F. R.*, glutamic acid of malignant tumour tissue, III, 1064.
- and Winternitz, *M. C.*, behaviour of di(hydroxymethyl) peroxide *in vivo* and *in vitro* and its effect on catalase activity of blood, III, 870.
- See also Velick, *S. F.*
- White, *J. C.*, hyperhidrosis of nervous origin and its treatment by sympathectomy, III, 570.
- White, *J. D.*, Rose, *F. W., jun.*, Calingaert, *G.*, and Soroos, *H.*, β , β -dimethylheptane: its synthesis and comparison with an isononane from petroleum, II, 295.
- White, *J. L.* See Bundesen, *H. N.*
- White, *J. U.* See Lewis, (*Miss*) *N.*
- White, *J. W.*, and Brown, *H. W.*, occurrence of vertical anomalies associated with convergent and divergent anomalies, III, 904.
- White, *M. G.*, Delsasse, *L. A.*, Fox, *J. G.*, and Greutz, *E. C.*, short-lived radioactivities induced in fluorine, sodium, and magnesium by high-energy protons, I, 592.
- Henderson, *M. C.*, Henderson, *W. J.*, and Ridenour, *L. N.*, production of high-energy α -particles by the Princeton cyclotron, I, 3.
- See also Barkas, *W. H.*, Delsasso, *L. A.*, Fox, *J. G.*, and Ridenour, *L. N.*
- White, *P.*, endocrine manifestations in juvenile diabetes, III, 380.
- and Winterbottom, *L.*, successful treatment of diabetic girls with protamine-zinc-insulin, III, 910.
- See also Marble, *A.*
- White, *P. D.* See Comeau, *W. J.*, Thompson, *W. P.*, and Wise, *N. B.*
- White, *P. R.*, accessory salts in the nutrition of excised tomato roots, III, 211.
- White, *R.* See Bratton, *A. C.*, and McClelland, *J. F.*
- White, *W. A.*, mineralogy of desert sands, I, 585.
- White, *W. R.*, and Noller, *C. R.*, saponins and sapogenins. IX. Oxidation of echinocystic acid and derivatives, II, 333.
- Whitehead, *H. R.* See Davies, *W. C.*
- Whitehead, *R. W.*, Burnett, *C. T.*, and Lagen, *J. B.*, diaphragmatic flutter with symptoms suggesting angina pectoris, III, 745.
- Whitehead, *S.*, and Hackett, *W.*, specific inductive capacity of diamonds by the method of mixtures, I, 181.
- See also Gemant, *A.*
- Whitehead, *W. M.*, and Carter, *C. C.*, sulphapyridine and pneumonia, III, 857.
- Whitehouse, *A. G. R.*, solubility of siliceous dusts and inhibitory action of added dusts, I, 71.
- Whitelaw, *W.* See Gaisford, *W. F.*
- Whiting, *G. C.* See Boswell, *J. G.*
- Whitmer, *R. M.*, and Lindsay, *G. A.*, anomalous dispersion of X-rays in calcite, I, 113.
- Whitmore, *F. C.*, and Bernstein, *H.*, electro-negativities of highly branched aliphatic groups, II, 12.
- and Harriman, *B. R.*, optical rotation of a Grignard reagent, II, 12.
- and Laucius, *J. F.*, polymerides of propylene from isopropyl alcohol and boron trifluoride, II, 238.
- Meyer, *R. E.*, Pedlow, *G. W., jun.*, and Popkin, *A. H.*, reducing action of primary Grignard reagents with trimethylacetyl chloride, II, 12.
- Whitmore, *F. C.*, Noll, *C. I.*, and Meunier, *V. C.*, synthesis of aliphatic *tert.*-butyl ketones, II, 202.
- and Olewine, *J. H.*, primary active amyl halides, II, 2.
- and Orem, *H. P.*, synthesis of tertiary hydrocarbons, II, 1.
- Popkin, *A. H.*, and Pfister, *R. J.*, reaction of neopentyl chloride with sodium, II, 400.
- and Rohrman, *E.*, treatment of neopentyl halides with mercury di-*p*-tolyl, II, 400.
- and Southgate, (*Miss*) *H. A.*, nonanes; β -methyloctane, γ -ethylheptane, β , γ -dimethylheptane, and β , β , δ -tetramethylpentane, II, 1.
- and Wheeler, *W. R.*, action of magnesium *tert.*-butyl chloride with acetyl chloride, II, 53.
- Whitaker, *J. S.*, Mattil, *K. F.*, and Popkin, *A. H.*, action of primary Grignard reagents with *tert.*-butyl-acetyl chloride. II, II, 12.
- Wittle, *E. L.*, and Harriman, *B. R.*, preparation of neopentyl iodide and bromide, II, 400.
- Wittle, *E. L.*, and Popkin, *A. H.*, common basis of intramolecular rearrangements. VI. Reactions of neopentyl iodide, II, 353.
- See also Bernstein, *H. I.*, and Karnatz, *F. A.*
- Whitmore, *W. F.*, and Gebhart, *A. I.*, microscopic identification of important substituted naphthalenesulphonic acids, II, 44.
- Whitnah, *C. H.*, Kunerth, *B. L.*, and Kramer, *M. M.*, riboflavin content of milk collected in different months and correlated with other constituents of milk, III, 165.
- Peterson, *W. J.*, Atkeson, *F. W.*, and Cave, *H. W.*, carotene balance and blood-carotene levels in heifers and lactating dairy cows: relation to production of off-flavour milk, III, 1067.
- Whitney, *R.*, and Burdick, *H. O.*, effect of massive doses of an oestrogen on ova transport in ovariectomised mice, III, 263.
- Whitsell, *L. J.* See Tainter, *M. L.*
- Whitten, *L. K.* See Gordon, *H. McL.*
- Whittingham, *H. E.*, preventive medicine in relation to aviation, III, 565.
- Whyte, *D. W.* See Boyd, *E. M.*
- Whyte, *R. O.*, and Oljovikov, *M. A.*, photoperiodism in the plant kingdom, III, 534.
- Whytlaw-Gray, *R.* See Baxter, *G. P.*, and Hartley, *G. A. R.*
- Wiardi, *P. W.*, crystalline vitamin- B_6 (adermin), III, 288.
- Wibaut, *J. P.* [with Hoog, *H.*, Langedijk, *S. L.*, Overhoff, *J.*, and Smittenberg, *J.*], preparation and the physical constants of a number of alkanes and cycloalkanes, II, 237.
- and Bickel, *A. F.*, formation of 2:3:4:6-tetrabromopyridine during bromination of 2:6-dibromopyridine at about 500°, II, 560.
- and Brockman, *F. W.*, pyridine and quinoline derivatives. XLII. Formation of (4-pyridyl)pyridinium compounds from 4-chloro- and 4-bromopyridine, II, 486.
- and Haayman, *P. W.*, ozonisation of *o*-xylene and the structure of the benzene ring, II, 537.
- Wibaut, *J. P.*, and Nicolai, *J. R.*, pyridine and quinoline derivatives. XLI. Chlorination of pyridine, II, 486.
- See also Turfneijer, *A.*
- Wiberg, *E.*, acidity potential as a measure of the free energy of protolytic reactions, I, 370.
- Wichers, *E.*, and Saylor, *C. P.*, scaling platinum to pyrex glass, I, 583.
- Wichmann, *H. J.*, isolation and determination of traces of metals; the dithizone system, I, 213.
- See also Cassil, *C. C.*
- Wichterle, *O.*, α -alkoxybutadienes, II, 3.
- Methylfurfurylpropionic acid, II, 334.
- and Vavrecka, *I.*, β -chlorobutyric acetals, II, 6.
- See also Votoček, *O.*
- Wicinski, *Z.* See Skowron, *S.*
- Wick, *A. N.* See Barnes, *R. H.*, and MacKay, *E. M.*
- Wick, *G. C.*, range of nuclear forces in Yukawa's theory, I, 55.
- Wieke, *E.*, velocity of sorption of gases in porous materials. I and II, I, 195, 254.
- Wicklen, *F. C. von.* See Caldwell, *M. L.*
- Wictorin, *C. G.*, separation of gold-platinum alloys, I, 17.
- Widdowson, *E. E.*, relation between range and energy for upper limits of β -ray spectra, I, 170.
- and Gregg, *S. J.*, absorption method for determining the range of recoil atoms, I, 396.
- See also Gregg, *S. J.*
- Widdowson, *E. M.*, iron administration and haemoglobin levels, III, 1025.
- See also McCance, *R. A.*
- Widenbaner, *F.*, hypovitaminosis-C, III, 852.
- Huhn, *O.*, and Ellinger, *R.*, determination of vitamin- B_1 in urine, III, 920.
- and Salm, *H.*, chemical determination of vitamin-C, III, 168.
- and Schneider, *Erich*, determination of reduced and total ascorbic acid in plasma, III, 233.
- and Wieland, *G.*, vitamin- B_1 consumption in adults, III, 850.
- Widiger, *A. H.*, and Brown, *W. G.*, fractionation of the hydrogen isotopes in the distillation of ethyl alcohol, I, 574.
- See also Brown, *W. G.*
- Widmann, *G.* See Täufel, *K.*
- Widmark, *E. M. P.* See Möller, *O.*
- Wiede, *R.*, and Gaddy, *V. L.*, solubility in water of carbon dioxide at 50°, 75°, and 100°, at pressures to 700 atmospheres, I, 194.
- Wiede, *W.* See Schmitz, *W.*
- Wiebenga, *E. H.*, crystal structure of diphenyldiacetylene, I, 458.
- Wiechmann, *F.*, and Heimbürg, *M.* [with Meisel, *K.*], affinity. LXXXVI. Affinity of rhenium for arsenic, I, 155, 211.
- Wieczorowski, *E.* See Gray, *J. S.*
- Wieder, *S.* See Weil, *A. J.*
- Wiegand, *J. A.*, vitamin- B_1 ; determination by the thiochrome method; in milk and milk powder; in cereals and potatoes, III, 287.
- Wiegand, *J. H.* See Standing, *M. B.*
- Wiegand, *M.*, antithyrotropic substances in blood of women with [puerperal] eclampsia, III, 1055.
- Wiegand, *C. W.*, and Anderson, *R. J.*, lipins of tubercle bacilli. LV. Wax fractions of human tubercle bacillus, II, 48.

- Wiekling, H. W. See Kangro, W.
- Wieland, G. See Widenbauer, F.
- Wieland, H., and Konz, W., the poison of *Naja tripudians*, III, 156.
- and Purmann, R., wing pigments of butterflies. IV. Relations between xanthopterin and leucopterin, II, 392.
- and Schlenk, H., quinovic acid. VII, II, 425.
- Schmitt, W., and Hrubesch, A., quinovic acid. VI, II, 425.
- Wieland, K., visible fluorescence spectrum of HgCl and the heat of formation of gaseous mercuric chloride, I, 352.
- Simplification of the fluorescence spectrum of HgBr by addition of foreign gases, I, 597.
- Wieland, M., determination of time of exposure in photomicrography, I, 103.
- Wieland, T. See Kuhn, R.
- Wiele, H. See Schwarz, R.
- Wielen, P. van der. See Groen, N. J. A.
- Wieler, A., relation between "masked" iron [in plants] and acids, III, 435.
- Leaf fall and the autumn yellowing of vegetative shoots, III, 635.
- Wiemann, J., reduction of α -ethylenic aldehydes, II, 357.
- See also Delwaulle, (Mlle.) M. L., and Glacet, Z. C.
- Wien, R., action of insulin during fever in the decerebrate cat, III, 582.
- See also Baines, E. J.
- Wienbeck, J., granulopoiesis of the juvenile bone marrow and its reaction to infections, III, 226.
- Wiener, H. J., diabetic coma requiring an unprecedented amount of insulin, III, 141.
- Wieninger, E. See Alam, M., and Anrep, G. V.
- Wiersma, C. A. G., and Marmont, G., motor and inhibitory innervation of the legs of brachyuran decapods, III, 242.
- See also Bergren, W. R., and Harreveld, A. van.
- Wiersma, J. T. See Clay, J.
- Wierzbiicki, M., dielectric constants of strong dilute uni-univalent electrolytes at various temperatures, I, 317.
- See also Kamecki, J.
- Wierzuchowski, M., and Bielinski, Z., effect of 3-piperidinomethyldioxan (933 F.) on nerve-endings of carotid sinus, III, 896.
- Effect of perfusion of gas [carbon dioxide] on chemo-receptors of carotid sinus, III, 968.
- See also Bielinski, Z.
- Wies, C. H. See Bruckner, W. J.
- Wiese, A. C., Elvehjem, C. A., Hart, E. B., and Halpin, J. G., prevention of perosis in the chick, III, 600.
- and Johnson, B. C., micro-determination of manganese in biological materials, III, 222.
- Johnson, B. C., Elvehjem, C. A., and Hart, E. B., phosphorus metabolism of chicks afflicted with perosis, III, 72.
- Johnson, B. C., Elvehjem, C. A., Hart, E. B., and Halpin, J. G., blood- and bone-phosphatase in chick perosis, III, 424.
- Wiesemann, W. See Müller, Eugen.
- Wieseneder, H., geology and petrography of the Rottenmann and Solk Tauern Mts. (Styria), I, 47.
- Wiesner, E. P. See Csato, T.
- Wiessmann, A., determination of the date of parturition, III, 58.
- Wiesthal, J., influence of irradiation with radon on different types of glass, I, 531.
- Wigand, R., local necrosis following intramuscular injection of quinine solutions, III, 510.
- Wiggers, C. J., dynamics of hypertension, III, 123.
- Influence of vascular factors on mean pressure, pulse pressure, and phasic peripheral flow, III, 236.
- and Wégria, R., active changes in size and distensibility of the aorta during acute hypertension, III, 361.
- Wiggert, W. P., and Werkman, C. H., fluoride-sensitivity of *Propionibacterium pentosaceum* as function of growth conditions, III, 793.
- Wiggins, L. F. See Peat, S.
- Wightman, H. B., soya bean sensitivity with a case report, III, 92.
- Wigner, E. See Hirschfelder, J. O.
- Wigner, E. P., theory of reaction rates, I, 568.
- Coupling conditions in light nuclei and the lifetimes of β -radioactivities, I, 595.
- Critchfield, C. L., and Teller, E., electron-positron field theory of nuclear forces, I, 595.
- Wigodsky, H. S. See Greene, R. R.
- Wigton, R. S., and Johnson, S. H., peripheral neuritis following sulphanilyl-sulphanilamide (disulphanilamide), III, 305.
- Wiig, E. O. See Barnes, S. W.
- Wijk, W. van. See Liempt, J. A. M. van.
- Wijk, W. R. van, and Seeder, W. A., influence of temperature and specific volume on viscosity of liquids. II, I, 191.
- Wikoff, H. L., Bame, E., and Brandt, M., determination of [blood]-bromine in protein-free filtrate, III, 356.
- Wilander, O., heparin, III, 354.
- Complete blood analysis of heparinised blood, III, 354.
- Wilbur, D. L. See Wilder, R. M.
- Wilcke, H. See Ohle, H.
- Willeke, H. L., Lee, C. D., and Murray, C., susceptibility and resistance of some strains of chickens to fowl leucosis, III, 633.
- See also Becker, E. R., and Lee, C. D.
- Wilcox, H. B., jun. See Andrus, E. C.
- Wilcox, H. W. See Link, G. K. K.
- Wilcox, L. D., lead poisoning from "canned heat," III, 865.
- Wilcox, L. Z. See Baldeschwieler, E. L.
- Wild, F. See Kipping, F. B.
- Wildbolz, E., role of vitamin-C in surgery and urology, III, 995.
- Wilde, W. S., distribution of potassium in the cat after intravascular injection, III, 609.
- Wilder, O. H. M. See Bethke, R. M., and Record, P. R.
- Wilder, R., why diabetics discontinue protamine-insulin, III, 910.
- Wilder, R. M., Rutledge, D. I., and Wilbur, D. L., diseases of metabolism and nutrition, III, 498.
- See also Cutler, H. H.
- Wilder, V. M. See Morgulis, S.
- Wilds, A. L. See Bachmann, W. E.
- Wildschut, A. J. H. See Jongbloed, J.
- Wildt, R., state of matter in interior of the planets, I, 56.
- Interpretation of molecular spectra and study of molecular spectra in celestial objects. VII. Electron affinity in astrophysics, I, 354.
- Wilens, G., adenoma of the liver, III, 1064.
- Wiles, H. O., and Maurer, S., anti-menorrhagic factor of mammalian liver-fat, III, 692.
- Wilgus, H. S., jun., Norris, L. C., and Heuser, G. F., effect of various calcium and phosphorus salts on severity of perosis, III, 600.
- See also Patton, A. R.
- Wilhelm, A. M. See Giordano, A. S.
- Wilhelm, J. O. See Findlay, J. C., Johns, H. E., and Mann, K. C.
- Wilhelm, L. A. See Lund, W. A.
- Wilhelmi, C. M., and Baca, D. E., comparison of methods for determination of phenol-red in gastric contents, III, 147.
- Wilke, W. See Reichert, B.
- Wilkerson, A. S., telluride tungsten mineralisation of the Magnolia mining district, Colorado, I, 586.
- Wilkerson, V. A., and Tulane, V. J., human epidermis. III. Occurrence of methionine in epidermis (stratum corneum), III, 916.
- Wilkes, E. T., whole milk plus carbohydrates in early infant feeding, III, 599.
- Wilkie, C. H., uleron treatment of gonorrhoea, III, 306.
- Wilkie, J. B., [spectrophotometric determination of] vitamin-A, III, 1069.
- Wilkins, C. J., and Soper, F. G., interaction of sulphur monoxide with nitrous and nitric acids, I, 333.
- Wilkins, H. L., [determination of] total chlorine in plants, III, 1114.
- See also Brunstetter, B. C.
- Wilkins, M. H. F. See Randall, J. T.
- Wilkins, R. W., Doupe, J., and Newman, H. W., rate of blood flow in normal fingers, III, 237.
- Weiss, S., and Taylor, F. H. L., action of pyruvic acid in normal and vitamin-B₁-deficient persons, III, 401.
- See also Doupe, J., and Newman, H. W.
- Wilkins, T. R., and St. Helens, H. J., grain-spacing of α -ray, proton, and deuteron tracks in photographic emulsions, I, 89.
- Wilkins, W. H., Harley, J. L., and Kent, G. C., ecology of the larger fungi. II. Distribution in part of Charlton Forest, Sussex, III, 635.
- Wilkinson, H. See Gridgeman, N. T.
- Wilkinson, J. F., Klein, Louis, and Ashford, C. A., hæmatopoietic activity of the human stomach in pernicious anemia, III, 116.
- See also Rowland, E. N.
- Wilkinson, T. See Hughes, G. K.
- Wilks, R. A. C., a new decalcification fluid, III, 112.
- Wilks, E., effect of intermittent feeding on development and growth of larvæ of *Periplaneta orientalis*, III, 282.
- Willard, H. H., and Greathouse, L. H., volumetric oxidation of iodide and bromide by periodic acid, I, 95.
- Smith, George M., tetraphenylarsonium chloride as an analytical reagent; titration by iodine; determination of mercury, tin, cadmium, and zinc; determination of rhenium, I, 336, 431, 489.
- See also Blicke, F. F.
- Willard, M. L. See Campbell, Barbara.
- Wille, E., vitamin-C and carbohydrate metabolism, III, 994.
- Wille, F., synthesis of $\alpha\alpha$ -diketoadipic acid; its biological importance, II, 297.
- Wille-Baumkauff, H., blood transfusion and blood donor agency in the surgical clinic of Gottingen University, III, 7.

- Willemart, A., dissociable anthracene oxides; photo-oxides of 9-cyclohexyl- and 10-cyclohexyl-9-phenylanthracene, II, 14.
See also Duveen, D.
- Willems, J., regular growth of *pp'*-dihydroxydiphenyl on calcite and on sodium nitrate, I, 308.
- Willenberg, H., light intensity of a black body at the temperature of solidifying platinum, I, 401.
- Willenegger, H. See Ottensooser, F.
- Willert, K. See Schneider, J. Z.
- Willett, E. L. See Davis, H. P.
- Willey, L. A. See Fink, W. L.
- Willheim, R. See Deutschberger, O.
- Williams, A. H. See Bowen, E. J.
- Williams, C., Phelps, D., and Burch, J. C., effect of testosterone on experimental endometrial hyperplasia in guinea-pig, III, 983.
- Williams, C. B., sulphanilamide in ophthalmology and otology, III, 178.
- Williams, C. E. See Hatch, T.
- Williams, C. H., and Hines, H. J. G., toxicity of *Salvia reflexa*, III, 1019.
- Williams, C. R., counting [dust] samples taken with the impinger, I, 539.
- Williams, Charles R., and Billings, M. P., petrology and structure of the Franconia quadrangle, New Hampshire, I, 47.
See also Silverman, L.
- Williams, Denis, sodium diphenylhydantoinate in epilepsy, III, 1038.
- Williams, Dudley, and Decherd, L., oscillation frequencies of nitrates, I, 402.
See also Gautier, T. N., Rogers, L. H., and Taschek, R.
- Williams, D. E. See Booher, L. E.
- Williams, D. H., skin temperature reaction to histamine in atopic dermatitis (disseminated neurodermatitis), III, 90.
- Williams, D. J., and Gibbs, F. A., electroencephalography in clinical neurology, III, 669.
- Williams, E., presence of "curious bodies" in lungs of South African gold miners, III, 513.
- Williams, E. J., scattering of fast electrons and of cosmic-ray particles, I, 291. Observations on cosmic rays using a large randomly operated cloud chamber, I, 547. Sensitive time of a Wilson expansion chamber, I, 581.
See also Walke, H.
- Williams, G. T., device to regulate intensity of metallographic illumination, I, 388.
- Williams, G. Z. See Weatherby, J. H.
- Williams, H. B., chronic lead poisoning, III, 615.
- Williams, H. E., determination of thiouracil and thiocyanates, II, 195.
and Irwin, D. A., silicosis: experimental study of the leaching of silicates in tissues, III, 317.
- Williams, H. H. See Beach, E. F., Bernstein, S. S., and Erickson, B. N.
- Williams, H. J. See Cioffi, P. P.
- Williams, J. C. See Bazemore, M. K.
- Williams, H. See Haxby, R. O., and Shepherd, W. G.
- Williams, J. R., effect of protamine insulinate on the oestrous cycle of white rats, III, 51. Improved tourniquet, III, 220. Effect of cocaine and ergotamine on renal pressor substance, III, 240.
- Williams, J. R., and Grossman, E. B., recovery of an adrenaline-like substance from the kidney, III, 151.
- Harrison, T. R., and Grollman, A., simple method for determining systolic blood pressure of unanaesthetised rat, III, 660.
- Wegria, R., and Harrison, T. R., renal pressor substance in hypertension of idronephrotic rats, III, 239.
See also Grossman, E. B., and Merrill, A.
- Williams, John Warren. See Elliott, M. A., and Lundgren, H. P.
- Williams, John Webster, difference in growth of pathogenic fungi with variation of medium and oxygen tension, III, 101.
- Williams, Jonathan W., synthesis of aldehydes by Stephen's method, II, 493.
- Williams, M. M. D. See Roth, G. M.
- Williams, N. E. See Simpson, J. C. E.
- Williams, P. C. See Noble, R. L., Rinderknecht, H., and Robertson, John Douglas.
- Williams, R. See Evans, D. P.
- Williams, R. C., fine structures of H_{α} and D_{α} under varying discharge conditions, I, 1. Determination of e/m from the H_{α} — D_{α} interval, I, 6. Survey of the durability of aluminium-coated mirrors in astronomical use, I, 537.
- Williams, R. D. See Olmsted, W. H.
- Williams, R. F., physiological ontogeny in plants and its relation to nutrition. VI. Analysis of the unit leaf rate, III, 948.
See also Petrie, A. H. K.
- Williams, R. H. See Merrill, A.
- Williams, R. J., lymphoid nodules of human bone marrow, II, 810.
- Williams, Roger J., pantothenic acid—a vitamin, III, 767.
and Pratt, E. F., fermentation test for thiamin, III, 702.
- Truesdail, J. H., Weinstock, H. H., jun., Rohrman, E., Lyman, C. M., and McBurney, C. H., pantothenic acid. II, III, 100.
- Weinstock, H. H., jun., Rohrman, E., Truesdail, J. H., Mitchell, H. K., and Meyer, C. E., pantothenic acid. III, II, 172.
See also Eakin, R. E., Mitchell, H. K., Pratt, E. F., and Weinstock, H. H., jun.
- Williams, R. R., vitamin- B_1 supply in relation to human needs, III, 285. Cereals as a source of vitamin- B_1 in human diets, III, 703.
- Williams, R. T., use of *dl*-menthol for preparation of biosynthetic glucuronic acid, II, 329. Detoxication. III. Use of glucuronic acid detoxication mechanism of the rabbit for resolution of *dl*-menthol, III, 998.
- Williams, R. W. See Owen, E. A.
- Williams, T. R. See Merrill, A.
- Williams, V., Hofstadter, R., and Herman, R. C., vibration spectra and molecular structure. VIII. Absorption spectra of light and heavy phenol and aniline vapours, I, 549.
- Williams, W. See Roberts, L. J.
- Williams, W. E., and Gogate, D. I., interferometric wave-length comparison of the red cadmium radiation emitted by different sources, I, 1.
and Middleton, A., vacuum wave-length measurements in the iron spectrum by means of the reflexion echelon grating, I, 543.
- Williams, W. O. See Winkler, A. J.
- Williamson, G. S., dietetics in dermatology; cutaneous manifestations of food allergy, III, 866.
- Willingham, C. B., separation of hydrocarbons of high mol. wt. by adsorption on silica gel, II, 307.
See also Mair, B. J.
- Willins, F. A. See Boland, E. W.
- Willis, H. B. See Gilman, H.
- Willis, H. W., crysipelas: analysis of 60 cases with ultra-violet irradiation as adjuvant in treatment, III, 512.
- Willis, R. A. See Stewart, M. J.
- Willison, A. M. See Lions, F.
- Willison, G. W., effects of bacterial toxins on erythrogenesis after chronic hæmorrhage, III, 350.
- Willius, F. A., embolic manifestations of heart disease, III, 895.
- Willmer, E. N., and Wallersteiner, K., effect of aldehydes on growth of cells *in vitro*, III, 763.
See also Pomerat, C. M.
- Willoughby, R. M. See Walther, H. W. E.
- Wills, J. H., and Fenn, W. O., potassium changes in submaxillary glands during stimulation, III, 269.
- Wills, L. See Evans, B. D. F.
- Willson, D. M., and Sunderman, F. W., effect of water restriction in a patient with Addison's disease receiving sodium chloride, III, 378.
- Willstaedt, H., and Michaelis, M., 1:4-dihydroxy-2-acetylanthraquinone, II, 120.
and With, T. K., determination of carotenoids and of vitamin-A in serum, III, 993.
See also Euler, H. von.
- Wilman, H. See Charlesby, A., and Goche, O.
- Wilshire, A. F. See Carter, A. G.
- Wilksa, A., action potential discharges of single muscle fibre, III, 1034.
- Wilson, (Miss) A. E. J. See Plant, S. G. P.
- Wilson, A. H., electrical conductivity of transition metals, I, 13.
- Wilson, A. J. C., heat capacity of Rochelle salt between -30° and 30° , I, 133.
- Wilson, A. T., Spreen, A. H., Cooper, M. L., Stevenson, F. E., Cullen, G. E., and Mitchell, A. G., sulphapyridine in treatment of pneumonia in infancy and childhood, III, 858.
- Wilson, A. T. M. See Davies, D. T.
- Wilson, B. H., Benld meteorite, Illinois No. 2, I, 225.
- Wilson, C., and Byrom, F. B., renal changes in malignant hypertension, III, 239.
- Wilson, C. L., analogies between electrolytic and chemical methods of reduction; experiments with sorbic acid, II, 241.
See also Hobden, F. W., and Nevell, T. P.
- Wilson, C. O., and Rising, L. W., extraction of alkaloids in toxicological analysis, III, 618.
- Wilson, C. W., boric acid colour reaction of flavone derivatives, II, 528.
- Wilson, D. A. See Ford, T. F.
- Wilson, D. C., rickets and dental caries, III, 769.
- Wilson, D. P., seasonal variation in the fat content of the flounder, *Pleuronectes flesus*, L., III, 762.
See also Cooper, L. H. N.
- Wilson, D. W. See Gurin, S., Irvin, J. L., Kurtz, A. C., and Zapp, J. A., jun.

- Wilson, E. B., jun., nuclear spin and symmetry effects in the heat capacity of ethane gas, I, 15.
See also Crawford, B. L., jun.
- Wilson, E. J., jun. See Pacsu, E.
- Wilson, F. H., spring clip for blood counting chamber, II, 349.
- Wilson, F. J. See Glen, W. L., Hopper, I. V., and McLean, J.
- Wilson, G. See Wheelon, H.
- Wilson, Gilbert. See MacGregor, M.
- Wilson, G. S., and Maier, I., sulphanilamide in *Brucella abortus* infection, III, 303.
- Wilson, H., Sappington, T. S., and Salter, W. T., oral administration of hormonal proteins; thyroid protein and insulin, III, 50.
- Wilson, Harold, and Goldsworthy, N. E., use of blood agar for identification of the types of *C. diphtheriae*, III, 428.
- Wilson, H. E. C., and Mitra, D. D., diet and physique survey in Assam, rural Bengal, and Calcutta, III, 161.
- Wilson, H. N., and Hughes, W. C., pyridine-acetic anhydride method for determining hydroxyl: preparation of pyridine of suitable quality, II, 194.
- Wilson, J. B., identification of flavouring constituents of commercial flavours. VIII. Semi-micro-determination of amino-nitrogen atom in semicarbazones, II, 526.
- Wilson, J. C. See Craddock, F. H., jun.
- Wilson, J. F., sulphanilamide in treatment of acute lupus erythematosus, III, 1080.
- Wilson, J. G., absorption of penetrating cosmic-ray particles in gold, I, 547.
- Wilson, J. N., attempted exchange of phosphorus between phosphorous and phosphoric acids, I, 36.
- Wilson, J. W., physiological properties of reptilian blood, III, 810.
- Wilson, L., and Kurzrok, R., cystic endometrial changes in ovulatory cycles, III, 381.
- Wilson, M. G. See Edwards, D. J.
- Wilson, P. W., and Umbreit, W. W., fixation and transfer of nitrogen in the soya bean, III, 532.
- Umbreit, W. W., and Lee, S. B., mechanism of symbiotic nitrogen fixation. IV. Specific inhibition by hydrogen, III, 212.
- See also West, P. M., and Wyss, O.
- Wilson, R., intravenous glucose tolerance curve as index of liver function and liver replacement therapy in cases of hepatic insufficiency, III, 843.
- Wilson, R. B., and Randall, L. M., excretion of pregnanediol during normal pregnancy, III, 265. Excretion of pregnanediol in the diagnosis of early pregnancy, III, 588.
- See also Randall, L. M.
- Wilson, R. R., formation of ions in the cyclotron, I, 590.
- and Kamen, M. D., internal targets in the cyclotron, I, 115.
- Wilson, R. S., and Gillman, S. W., medullary luminal prolonged narcosis, III, 312.
- Wilson, S. H., measurement of amount of steam escaping from areas of volcanic or solfataric activity, I, 496. Analysis of hot-spring gases, I, 541.
- Wilson, S. J., treatment of postoperative parathyroid insufficiency with dissolved calcium lactate, III, 255.
- and Doan, C. A., pathogenesis of haemorrhage in artificially induced fever, III, 1027.
- See also Reinhart, H. L.
- Wilson, T. C., photoconductivity of metal films, I, 181. Effect of high pressure on the order-disorder transformation in alloys, I, 606.
- Wilson, V. C., nature of the penetrating cosmic rays, I, 175.
- Wilson, W., and Cattermole, (Miss) J., the elementary particle, I, 117.
- Wilson, W. B., ideal body type for an aviator, III, 643.
- Wilson, W. C. See Henderson, W. R., and Lowdon, A. G. R.
- Wilson, W. H. See Hammouda, M.
- Wimmer, K. See Hirt, A.
- Wimpheimer, S., and Feresten, M., effect of castration on tubal contractions of the rabbit, as determined by the Rubin test, III, 979.
- See also Feresten, M.
- Winand, L., calorimetric study of the radiation from the active deposit of thorium, I, 545.
- See also Cotele, (Mme.) S.
- Winans, J. G., and Cram, S. W., nichrome furnace of long life, I, 579.
- Winch, G. T. See Atkinson, J. R.
- Winchell, H., micropycnometer for determination of densities of heavy solids, I, 160.
- See also Palache, C.
- Winchester, C. F., influence of thyroid on egg production, III, 679.
- and Kleiber, M., effect of environmental temperature on mortality, rate of growth, and utilisation of food energy in white Leghorn chicks, III, 170.
- Winckler, G., structure of the semispinalis muscle of man, III, 345.
- Windaus, A., constitution of sterols and steroids, II, 156. Vitamin-E, III, 292.
- and Bock, F., antirachitic provitamin of wheat-germ oil, III, 77.
- and Buchholz, K., ketone from vitamin-D₂, II, 75. Hydrogenation of ergosterone, II, 212.
- Deppe, M., and Roosen-Runge, C., pyrovitamins-D₂ and their dehydro-derivatives, II, 61.
- and Guntzel, B., products of irradiation of 22-dihydroergosterol, II, 316.
- and Raichle, K., derivatives of 3:4-benzpyrene, II, 106.
- and Roosen-Runge, C., constitution of dihydrovitamin-D₂ and -D₃, I, 421.
- and Zuhlsdorff, G., product of the irradiation of Δ^5 -cholestadienol, II, 18.
- Windemuth, E. See Alder, K.
- Winder, C. V., extra-vagal component of carotid sinus pressoreceptive cardiac restraint, III, 238.
- Bernthal, T., and Weeks, W. F., reflex hyperpnoea and vasoconstriction due to ischaemic excitation of the carotid body, III, 239.
- Winding, C. C., and Rhodes, F. H., accurate micromanometer, I, 106.
- Windle, W. F., induction of mating and ovulation in cat with pregnancy-urine and -serum extracts, III, 1053.
- and Bishop, C. L., prenatal intestinal movements in anoxaemia, III, 825.
- and Steele, A. G., reciprocal oxygen changes on both sides of placenta during uterine contraction and relaxation, III, 266.
- See also Steele, A. G.
- Winfield, G., simple volume recorder, III, 639.
- Wing, M. See Guest, G. M.
- Wingchen, H. See Fischer, W.
- Winge, O., reproduction in yeasts and artificial cross-breeding of yeast under the microscope, III, 941.
- and Laustsen, O., new yeast types produced by hybridisation, III, 789.
- Wingfield, C. A., function of gills of mayfly nymphs from different habitats, III, 1033.
- See also Fox, H. M.
- Winiwarter, F., pharmacological study of ear scratch reflex, III, 829.
- Winkel, A., and Haul, R., ferromagnetic ferric oxide aerosols and hydrosols, I, 23.
- Winkelman, L. See Schiffmann, A.
- Winkelman, N. W., metrazol treatment in schizophrenia, III, 131.
- Winkenwerde, W. L. See Eagle, H.
- Winkler, A., gold treatment of tuberculosis and chronic rheumatism, III, 779.
- See also Kappus, A. L.
- Winkler, A. J., and Williams, W. O., carbohydrate metabolism of *Vitis vinifera*: hemicellulose, III, 212.
- Winkler, A. W., Hoff, H. E., and Smith, P. K., electrocardiographic changes and concentration of potassium in serum following intravenous injection of potassium chloride, III, 234.
- See also Hoff, H. E., and Smith, P. K.
- Winkler, C. A., dew-point hygrometer for use at low temperatures, I, 339.
- Winkler, E. See Julez, M.
- Winkler, H., ascorbic acid excretion in pregnancy, III, 768.
- and Binder, A., foetal production of hormones, III, 905. Hormone production in adrenals of newborn, III, 976.
- and Hebel, F., behaviour of blood-ketones during exercise in the untrained, III, 653. Action of evipan anaesthesia on blood-lactic acid and -ketones, III, 863. Blood-acetone and -lactic acid during parturition and its significance for the contractions of the uterus, III, 913.
- and Klees, E., effect of evipan anaesthesia on blood-sugar, III, 863.
- and Seebach, W., administration of vitamin-C during menstrual cycle, III, 704.
- Winkler, H. G. F., thixotropy of mineral powders of microscopic size, I, 77.
- Winkler, K. C., complex coacervates as models for biological membranes, III, 622.
- Winkler, W., nervous and hormonal control of basal metabolic rate, III, 706.
- Winkler, W. O., [determination of] mercury, I, 535.
- Winogradsky, S., origin of ammonia liberated by nitrogen-fixing bacteria, III, 328.
- Winslow, A. T. See Liebhafsky, H. A.
- Winslow, C. E. A., Herrington, L. P., and Gage, A. P., relative influence of radiation and convection on temperature regulation of the clothed body, III, 316. Reactions of the clothed human body to variations in atmospheric humidity, III, 419.
- See also Gage, A. P.
- Winslow, E. H. See Liebhafsky, H. A.
- Winslow, N. M., structure of murexides and alloxantines, II, 488.
- Winsor, A. L., and Korchin, B., technique for study of secretions from oral mucosa in man, III, 841.

- Winstead, J. A., Smith, C. T., and Watson, A. C., leukemia of undetermined type suggesting mixed leukæmia, III, 1027.
- Winstein, S., reduction of 2-bromocyclohexanone with aluminium isopropoxide, II, 365. Solvolysis of *tert*-butyl chloride; solvolytic reactions and the Walden inversion, II, 400.
- and Lucas, H. J., reaction steps in the conversion of β -diacetoxybutane into β -dibromobutane, II, 401. Retention of configuration in the reaction of γ -bromobutan- β -ols with hydrogen bromide, II, 401.
- Pressman, D., and Young, W. G., stereoisomerism of unsaturated compounds. V. Mechanism for the formation of butenes from β -dibromobutanes by the action of iodide ion, II, 399.
- Winstrom, L. O., and Warner, J. C., kinetic salt and medium effects in the reaction between ethylene chlorohydrin and hydroxyl ion, I, 375.
- Winter, A. See Günther-Schulze, A.
- Winter, E. See Bodenstein, M.
- Winter, E. A. See Bridge, E. M.
- Winter, H. C. See Pence, L. H.
- Winter, L. C., fat metabolism following liver injury; decreased iodine value of tissue-fatty acids of male rats following carbon tetrachloride administration, III, 607.
- Winterbottom, L. See White, P.
- Winterfeldt, K., and Holschneider, F. W., lupin alkaloids. XVII. Attempted synthesis of *allolupinine*. XVIII. Synthesis of *allolupinine*, II, 395, 456.
- and Schirm, M., lupin alkaloids. XVI. Oxidative degradation of Wolfenstein's dehydrosparteine, II, 129.
- Winterhager, H. See Koch, Willy, and Röntgen, P.
- Winternitz, M., and Langendorf, R., electrocardiogram in pericarditis. I and II, III, 360.
- Winternitz, M. C. See White, Julius.
- Winters, L. M. See Cole, C. L.
- Winters, M., Tompkins, C. A., and Crook, G. W., pectin-agar diets in treatment of bacillary dysentery of infants and children, III, 931.
- Winterstein, A., relationships between carcinogenic substances and sex hormones, III, 282.
- See also Reinert, M.
- Winterstein, H., and Basoglu, M., metabolism of ventral cord of earthworm, III, 1039. "Irritation" metabolism and "excitation" metabolism of nervous system, III, 1039.
- Winterstein, J., pituitary blood vessels in man, III, 345.
- Wintersteiner, O. See Dutcher, J. D., Hirschmann, H., and Pearlman, W. H.
- Winterton, W. R., and MacGregor, T. N., clinical use of diethylstilbestrol, III, 264.
- Winther, E., abnormal course of retinal blood vessels of the same type found in a father and his son, III, 1041.
- Winther, K. See Fremming, K.
- Winton, F. R., recording of urine flow, III, 695.
- See also Kramer, K.
- Winton, S. S. See Heard, R. D. H.
- Wintrobe, P., factors of unity and individuality of the germ plasma in development of amphibians, III, 61. Direct relation between time of appearing of the lips of the blastopore in amphibia, and activity of corresponding foci of mitogenetic induction, III, 112.
- Wintrobe, M. M., diagnostic significance of changes in leucocytes, III, 742. Anti-anæmic effect of yeast in pernicious anæmia, III, 742.
- Stowell, A., and Roll, R. M., aplastic anæmia following gold injections with recovery, III, 811.
- Wintrup, J. P., use of zinc peroxide in mouth infections, III, 865.
- Winzeler, H. See Fehr, A.
- Winzler, R. J., and Baumberger, J. P., photometric method for the determination of carbon dioxide, I, 487. Degradation of energy in metabolism of yeast cells, III, 199.
- Winzor, F. L. See Cooke, R. G., and Macbeth, A. K.
- Wirth, D., Rosmann, F., and Benndorf, G., specific reactions of the hæmatopoietic system. V. The pig. VI. Cattle, III, 115.
- Wirtschaffter, Z. T., and Schartz, E. D., acute ethylene dichloride poisoning, III, 621.
- Wirtz, D. See Wetzel, W.
- Wirtz, H., separation of tantalum and niobium, I, 432.
- Wirtz, K., thermo-diffusion in liquids, I, 470. See also Frank, F. C., and Korsching, H.
- Wirz, W. See Ruzicka, L.
- Wischin, A., thermal decomposition of crystals of barium azide, I, 571.
- Wise, B., and Hoff, H. E., effect of the autonomic hormones on the thyrotoxic heart, III, 84.
- Wise, E. C. See Correll, J. T.
- Wise, G. H., Gullickson, T. W., and Petersen, W. E., value of various vitamins and inorganic salts for overcoming symptoms manifested in calves restricted to a whole-milk ration, III, 917. Inadequacy of a whole-milk ration for dairy calves as manifested in changes of blood composition and other physiological disorders, III, 917.
- Wise, I. M., home-made electric bone saw, III, 734.
- Wise, L. E. See Harlow, W. M., and Hart, R. S.
- Wise, N. B., Comeau, W. J., and White, P. D., electrocardiograms in twins, III, 820.
- Wiseman, J. See Cooper, K. E.
- Wishengrad, M. See Kornblith, B. A.
- Wishnick, D. M. See Sandell, E. B.
- Wishnick, E. L. See Sandell, E. B.
- Wislicki, L. See Macdonald, A. D.
- Wislocki, G. B., topography of the hypophysis in the *Xenarthra*, III, 45. Blood supply of the hypophysis cerebri of the rhesus monkey, III, 441.
- Wisniewski, F. J., excited states of nuclei, I, 294. Structure of nuclei, I, 297.
- Wefelmeier's model of trans-uranium, I, 352.
- Wisselinck, A. See Fuchs, H.
- With, T. K. See Willstaedt, H.
- Witham, L., Russell, M. K., and Scott, A. V., suggestions for feeding refugees, III, 848.
- Withell, E. R., evaluation of bactericidal action, III, 433.
- Witheridge, W. N. See McCord, C. P.
- Withers, F. W., squamous-celled carcinoma of tonsil in dog, III, 990.
- Withers, O. R., food allergens. II. Atopic reagins and botanical classification of foods, III, 618.
- Witkin, M., practical points in feeding of healthy infants, III, 991.
- Witkowski, E. See Houghten, F. C.
- Witmer, E. E., regularity in nuclear magnetic moments, I, 507.
- Witsch, F. See Schlomka, G.
- Witschi, E. See Riley, G. M.
- Witt, W. van de, action of albugin in gonorrhæa, III, 1083.
- Witte, C. H. D., derivatives of 4-chloro-3-nitrobenzonitrile, II, 423.
- Witte, H., crystal chemistry of alloys: system magnesium-copper-silicon with particular reference to the section $MgCu_2$ - $MgSi_2$, I, 465.
- See also Wallbaum, H. J.
- Witte, M. See Shriner, R. L.
- Witterbolle, P. See Bessemans, A.
- Wittig, G., occurrence of free radicals during organic reactions, II, 95.
- and Hartmann, H., preparation of multiply unsaturated nitriles and aldehydes. II, II, 427.
- and Lange, W., autoxidation of benzaldehyde in presence of didiphenylene-ethylene, II, 22.
- and Pockels, U., replaceability of aromatically united bromine by lithium by means of lithium phenyl. II, II, 112. Replacement of aliphatically united bromine by lithium by means of lithium phenyl. III, II, 238.
- See also Schulz, G. V.
- Wittle, E. L. See Marker, R. E., and Whitmore, F. C.
- Wittmann, L. See Runge, H.
- Wittner, F. See Honigsehmied, O.
- Witzmann, H., micro-colorimeter with selenium-film cells, I, 580. Measurement of the porosity of filters, I, 583.
- Wizinger, R., and Coenen, M. L., reaction of chloronitrobenzenes with unilaterally positivised ethylenes, II, 340.
- Wohlisch, E., blood coagulation as a colloid-chemical problem, III, 195. Thermo-elastic properties of elastic tissue as basis for kinetic theory of rubber-like elasticity, III, 1007.
- and Renk, F., thermal extension of the musculature, III, 747.
- Woelfler, E. A. See Holmes, A. D.
- Woerd, L. A. van der, action of sex hormones on preputial glands of rats, III, 143. Nomenclature of accessory sex glands in male rat, III, 738. Accessory sex gland ducts related to colliculus seminalis of rat, III, 738.
- and De Jongh, S. E., comparison of activity of androsterone and testosterone, III, 54.
- See also Sindram, I. S.
- Woerdeman, M. W., inducing capacity of the embryonic eye, III, 37. Lens induction, III, 673.
- Wordenoff, P., new test for hypovitaminosis-C, III, 921.
- Woerner, C. A., islands of Langerhans after continuous intravenous injection of glucose, III, 261. Continuous intravenous injections into small animals, III, 815.
- See also Bensley, S. H.
- Woglom, W. H., sarcoma 37 and virus problem, III, 698.
- Wohl, A., spectral study of the arylamines and their hydrochlorides, I, 507. Ultraviolet absorption of diazonium salts, I, 507.
- Wohl, M. G., and Feldman, J. B., vitamin-A deficiency in thyroid disease: its detection by dark-adaptation, III, 476.

- Wohlfart, G., age changes in the eye muscles, III, 368.
- Wohlfeil, T., and Becker, Heinrich, inhibition and promotion of bacterial enzymes in infected animals. III. Influence of ferrous ammonium sulphate, ferrous ascorbic acid, phosphates, and magnesium on diphtheria immunity, III, 202.
- Wojciechowski, J., granite from Holyżówka (Wolhynien), I, 498.
- Wojciechowski, M., ebulliometric method of measuring adsorption, I, 254. Physical constants of hydrocarbons and their structural isomerides, II, 353.
- Wojtusiak, R. J., and Ferens, B., orientation and flight of birds. IV., III, 130.
- Woke, P. A., biological disposition of rotenone after ingestion by the southern armyworm, III, 409.
- Woker, G., and Antener, I., colour reactions of sterols, II, 156. Further colour reactions of sterols in their relationship to constitutive factors, II, 322. Furfuraldehyde [colour] reactions of vitamin-D₂, hormones of the adrenal cortex, the corpus luteum, and the androsterone and testosterone group and their relationships to constitutive factors, II, 327.
- Wokes, F., assay of thyroid on tadpoles, III, 40.
- Wolbach, S. B. See Bessey, O. A.
- Wolf, A., Cowen, D., and Paige, B., human toxoplasmosis: occurrence in infants as an encephalomyelitis; verification by transmission to animals, III, 728.
- Wolf, D. E. See Fuson, R. C.
- Wolf, E. See Crozier, W. J.
- Wolf, F., collisions of doubly positive ions, I, 169.
- Wolf, H. J. See Glatzel, H., and Tschesche, R.
- Wolf, J. See Lucke, H.
- Wolf, J. E., vitamin and enzyme content of the blood during infections in high altitudes, III, 121.
- Wolf, K., sputtering from slightly conducting films formed in the discharge on heated glass, I, 290. Normal and subnormal ratios and divisions of the glow discharge at a flat, semi-conducting electrode of heated glass, I, 290.
- Wolf, K. L., radius, action, and mobility of the polar OH group in alcohols, I, 356. See also Harms, H.
- Wolf, L., use of Henpel's gas pipette with four bulbs, I, 539.
- Wolf, W., respiratory insufficiency in bronchial asthma, III, 661. See also Zaeper, G.
- Wolfe, C. W., canizzarite and bismuthinite from Vulcano, Lipari Islands, I, 164. See also Richmond, W. E.
- Wolfe, J. M. See Hamilton, J. B.
- Wolfe, R. A., and Duffendack, O. S., quantitative spectrochemical analysis of mixtures of gases, I, 485. See also Duffendack, O. S.
- Wolffenden, J. H. See Hegan, D. S., and Moss, R. L.
- Wolfer, J. A., evidence that pancreatic juice reflex may be etiologic factor in gall-bladder disease, III, 759.
- Wolferth, C. C. See Wood, Francis C.
- Wolffes, O. See Kreitmair, H.
- Wolff, A. See Butenandt, A.
- Wolff, Eberhard. See Meyer, K. H.
- Wolff, Etienne, action of diethylstilbestrol on the genitalia of chicken embryos, III, 757.
- Wolff, E. K., buffer precipitation test (B.P.T.) for malaria, III, 628.
- and Austin, L. D. C., preservation of pathological museum specimens under tropical conditions, III, 110.
- Wolff, G., cancer and race with special reference to the Jews, III, 848.
- Wolff, H., corneal ulceration and avitaminosis-A, III, 493.
- Wolff, H. G. See Clark, D., and Milhorat, A. T.
- Wolff, H. L., cumulation of drugs, III, 1005. Cumulative poisoning by barbital, III, 1005. Cumulative poisoning by chloroform, III, 1005.
- Wolff, H. M. See Dobrovolskaia-Zavadskaia, N.
- Wolff, J., prontosil tolerance, III, 1084.
- Wolff, Jules, biological oxidation and reduction, III, 537.
- Wolff, J. E., igneous rocks of the Crazy Mountains, Montana, I, 110.
- Wolff, K. See Fehlow, W.
- Wolff, L. K., significance of determination of vitamins in blood and body fluids in estimating the state of nutrition, III, 849.
- and Julius, H. W., action of sulphanilamide *in vitro* and *in vivo*, III, 773. See also Emmerie, A.
- Wolff, R., electrophotometric microdetermination of magnesium in biological media, III, 222. Effect of gonadotropic material on serum-magnesium, III, 576. Pancreotropic hormone of anterior pituitary, III, 973. See also Champy, C.
- Wolffhard, H., temperature equilibrium and temperature measurement in flames, I, 298.
- Wolffe, M., magnetostriiction of liquid oxygen, I, 65.
- Wolfram, S., new methods in treatment of skin and venereal diseases, III, 180.
- Wolfram, W., treatment of puerperal sepsis with argotropin, III, 414.
- Wolfrom, M. L., Burke, W. J., and Waisbrot, S. W., tritylation experiments in the sugar alcohol series, II, 402.
- Konigsberg, M., and Weisblat, D. I., aldehydo-d-mannose-pentacetate ethyl hemi-acetal, II, 202.
- Myers, D. R., and Lassette, E. N., molecular size of starch by the mercaptalation method, II, 494.
- and Sowden, J. C., cellulose hydrolysis by ethyl mercaptan. III, II, 52.
- Sowden, J. C., and Lassette, E. N., molecular size of methylated cellulose, II, 301.
- and Waisbrot, S. W., behaviour of the dimethyl acetals of glucose and galactose under hydrolytic and glucoside-forming conditions, II, 407.
- Wolfshaut, C. See Azerad, E.
- Wollack, (Miss) A. See Hutchinson, G. E.
- Wollan, E. O. See Schein, M.
- Wollenberg, stirrer driven from below without stuffing boxes, I, 105.
- Wollman, E., and Lacassagne, A., determination of relative dimensions of bacteriophages by their sensitivity to irradiation, III, 1014.
- and Wollman, (Mme.) E., "phases" of the lysogenic function: successive action of lysozyme and trypsin on a lysogenic organism, III, 946.
- "Phases" of the lysogenic function of sensitive bacteria, III, 946. See also Lacassagne, A.
- Wollman, (Mme.) E. See Wollman, E.
- Wollner, A., histological correlationship of endometrial and cervical biopsies, III, 59.
- Wollschitt, H. See Bothe, W.
- Wollstein, A., subjective effects of cephalotropic amines in man. III. Action of cephalotropic amines on intelligence scores, III, 1037. See also Jacobsen, E.
- Wollweber, G., measuring the decay of phosphorescence and its application to the ZnS-CdS-Cu phosphor on excitation by an electron beam, I, 59.
- Wolman, I. J. See Ash, R.
- Woloszyn, M. See Bezssonoff, N.
- Wolpert, K. See Schroeder, H.
- Wolter, H. See Jores, A.
- Wolter, J. W. See Sharp, E. A.
- Woltersdorf, W. See Langenbeck, W.
- Woltman, H. W. See Wagener, H. S.
- Wong, C. Y., induced parthenocarp of water-melon, cucumber, and pepper, III, 732.
- Wong, S. C., and Kurotchkin, T. J., antigenic activity of polysaccharides of *B. rhinoscleromatis*, III, 205. Significance of acetyl group in determining antigenic activity of bacterial polysaccharides, III, 1014.
- and Tung, T., serological studies on polysaccharides derived from diphtheroids, III, 1012.
- Woo, T. See Chu, F. T.
- Woo, T. M. See McBain, J. W.
- Wood, A. D. See McKenzie, A.
- Wood, C. E. See Nissau, A. H.
- Wood, D. A., [trichloroethanol compared with] avertin, III, 314.
- Wood, E. H. See Moe, G. K.
- Wood, F. C., and Merritt, C. A., Soper, Oklahoma, meteorite, I, 284.
- Wood, Francis C., Wolferth, C. C., and Bellet, S., electrocardiogram in infarction of the lateral wall of the left ventricle, III, 17.
- Wood, F. G., X-ray kymography of the heart, III, 361. See also Konstam, G. L. S.
- Wood, J. G., and Petrie, A. H. K., nitrogen metabolism of plants. II. Interrelations among soluble nitrogen compounds, water, and respiration rate, III, 107. See also Petrie, A. H. K.
- Wood, J. L., and Du Vigneaud, V., racemisation of benzyl-L-cysteine; preparation of D-cystine, II, 495. See also Du Vigneaud, V., and Kies, M. W.
- Wood, M. T. See Todd, W. R.
- Wood, P., and Selzer, A., new sign of left ventricular failure, III, 559. Chest leads in clinical electrocardiography, III, 559.
- Wood, R. W., and Dieke, G. H., negative bands of ¹⁴N-¹⁵N, I, 1. Nuclear spin of ¹⁵N I 49.
- Wood, S. E. See Scatchard, G.
- Wood, S. R., and Carlson, A., preparation and identification of three alkali molybdo-tellurates, I, 485.
- Wood, W. A., lower limiting crystallite size and internal strains in some cold-worked metals, I, 553.
- Wood, W. B., jun., anaemia during sulph-anilamide therapy, III, 303.
- Wood, W. H. See Morton, A. A.
- Woodard, G. See Laug, E. P.
- Woodbury, R. A. See Hamilton, W. F.

- Woodcock, A. H., gas thermometer for use at very low temperatures, I, 42.
- Woodcock, D. See Haworth, R. D.
- Woodford, H. K. See Gregory, F. G.
- Woodhall, B., Graves, R. W., and Beard, J. W., experimental production of tumours of the brain with Shope rabbit papilloma, III, 598.
- and Seeds, A. E., cranial venous sinuses, III, 237.
- Woodhead, G. D., diallylmalonyleurea in psychiatry, III, 185.
- Woodhead, L. S. F. See Greval, S. D. S.
- Woodhouse, D. L. See Hunt, H. B.
- Woodland, A. W., petrological studies in the Harlech Grit series of Merionethshire. I. Metamorphic changes in the mudstones of the manganese shale group. II. Petrography and petrology of some of the grits. III. Development of pyrite in the grits and mudstones, I, 109, 163. Petrography and petrology of the Lower Cambrian manganese ore of W. Merionethshire, I, 497.
- Woodmansey, A., Collins, D. H., and Ernst, M. M., vascular reactions to contrast baths in health and rheumatoid arthritis, III, 238.
- Woodruff, N. H., soil acidity at roots of Tennessee pteridophytes, III, 211.
- Woodruff, P. W. See Dieckmann, W. J.
- Woodward, G. E., hydrolysis of glutathione by blood serum, III, 940.
- See also Dohan, J. S., and Schroeder, E. F.
- Woodward, (Miss) I. See De Lange, J. J., and Ubbelohde, A. R.
- Woodward, J. C. See Barnum, C. G.
- Woog, P. See Barrillon.
- Woolcock, C. E. See Pennycuik, S. W.
- Woolbridge, D. E., secondary emission, I, 590.
- Woolfe, J. B., pancreatic extract (enzyme-free) in treatment of diabetic and arteriosclerotic gangrene, III, 363.
- Woollard, H. H., and Harpman, J. A., cortical projection of the medial geniculate body, III, 668. Discontinuity in nervous system of coelenterates, III, 1023.
- See also Harpman, J. A.
- Woolley, D. W., biological responses to constituent parts of pantothenic acid, III, 1015.
- Berger, Julius, Peterson, W. H., and Steenbock, H., toxicity of *Aspergillus sydowii* and its correction, III, 283.
- Waisman, H. A., and Elvehjem, C. A., nature and partial synthesis of the chick antidermatitis factor, III, 704. Structure of the chick antidermatitis factor, III, 921.
- Woolley, G., Fekete, E., and Little, C. C., mammary tumour development in mice ovariectomised at birth, III, 846.
- Woolley, H. W., problem in heat conduction, I, 410.
- Woolman, A. M. See Kon, G. A. R.
- Woolsey, F. M., and Black, J. R., vitamin-C deficiency and intestinal fusospirochaetosis, III, 1072.
- Woolsey, G., equations of state, I, 311.
- Wooten, L. A. See Clarke, B. L.
- Worden, (Miss) M. E. See McBain, J. W.
- Work, C. E. See El-Sadr, M. M., and Macrae, T. F.
- Work, T. S., Bergel, F., and Todd, A. R., active principles of *Cannabis indica* resin. I, II, 121.
- See also Jacob, (Miss) A.
- Worm, M., occurrence and concentration of choline and choline-containing lipins in bile, III, 390.
- Wormald, H., bacterial diseases of stone fruit trees in Britain. VII. Organisms causing bacterial diseases in sweet cherries, III, 215.
- Wormall, A. See Berenblum, I., Boursnell, J. C., and Gaunt, W. E.
- Worms, G., and Berthélemy, A., pharyngeal tonsil: its development at different age periods, III, 1021.
- Coulouma, P., Debeyre, J., and Cazalas, A., peripharyngeal fascial spaces in man, III, 441.
- Wormwell, F. See Vernon, W. H. J.
- Woronzowa, M. A. See Liosner, L. D.
- Worrall, D. E., action of aromatic amines on 2-chloro-4- ω -dinitrostyrene, II, 57. Action of ammonia and aromatic amines on ω -nitro-4-methylstyrene and related compounds, II, 57.
- and Benington, F., action of *p*-toluidine and *p*-phenylenediamine on substituted nitrostyrenes, II, 57.
- and Finkel, J., [condensation of] aromatic amines and 2-bromo-5- ω -dinitrostyrene, II, 541.
- and Lavin, E., phenylpropiolthio-*p*-chloroanilide, II, 129.
- Lerner, M., and Washnock, J. jun., reactions of phenylpropiol[thio]-*p*-iodoanilide and related thioamides, II, 129.
- Worthington, H. See Reid, E. E.
- Worthington, R. V. See Weinstein, L.
- Wortis, E. See Liebmann, J.
- Wortis, H. See Bowman, K. M., and Liebmann, J.
- Wortis, S. B., and Marsh, F., lactic acid contents of blood and spinal fluid, III, 132.
- Worts, J. See Bowman, K. M.
- Wotton, R. M. See Zwemer, R. L.
- Woylas, B., treatment of influenza with sulphonamide, III, 710.
- Wrede, C. M. See Granit, R.
- Wrenshall, C. L. See Smith, G. R.
- Wretblad, P. E., β -phase of the system As-Sb, I, 145.
- Wrigge, F. W. See Biltz, W.
- Wright, C. I., effect of sodium selenite and selenate on oxygen consumption of mammalian tissues, III, 171.
- Wright, C. W., lead-zinc ore deposits and geology of the Arbus area in Sardinia, Italy, I, 284.
- Wright, D. A., absorption of gases by tantalum, I, 21.
- Wright, E. V. See King, H.
- Wright, F. E., splitting of mica (muscovite) for optical purposes, I, 627.
- Wright, F. H., paroxysmal nodal tachycardia treated with mecholyl, III, 1030.
- and Paige, B. H., neurogenic tumours of the sympathetic nervous system in children, III, 570.
- See also Parsons, C. G.
- Wright, F. I., energy distribution of electrons emitted from a hot filament, I, 229.
- Wright, G. F., relative reactivities of magnesium methyl chloride and magnesium dimethyl, II, 304. Addition of alkali metals to stilbenes, II, 498.
- See also Klopp, A. H., and Lieff, M.
- Wright, H. D., clinical severity of diphtheria in certain cities in Great Britain, III, 875.
- See also Brown, J. B.
- Wright, I. See McGovern, T.
- Wright, I. S., and MacLenathen, E., excretion of vitamin-C in sweat, III, 704. Intradermal test for vitamin-C determination, III, 705. Potassium cyanide as an agent inhibiting the oxidation of vitamin-C *in vitro*, III, 705.
- Schneider, R. F., and Ungerleider, H. E., errors in blood pressure readings, III, 21.
- See also Flexner, J., Littauer, D., McGovern, T., and Westcott, F. H.
- Wright, J. See Bell, R. P.
- Wright, K. A., Abbott, A. D., Sivertz, I., and Tartar, H. V., sulphonates. V. Electrical conductance of sodium decyl-, dodecyl-, and hexadecylsulphonate solutions at 40°, 60°, and 80°; micelle formation, I, 258.
- and Tartar, H. V., sulphonates. III. Solubilities, micelle formation, and hydrates of the sodium salts of the higher alkyl sulphonates. IV. Densities and viscosities of sodium dodecylsulphonate solutions in relation to micelle formation, I, 258.
- Wright, L. D., and Haag, J. R., lactation-promoting effect of *L*-cystine when fed with lucerne proteins, III, 1066.
- Wright, L. E. A. See Hughes, G. K.
- Wright, M. D. See Baker, A. Z.
- Wright, N., infra-red absorption spectrum of amino acids, I, 179.
- Wright, R. D., blood supply of abnormal tissues in the lungs, III, 24. Adrenal rest in the kidney containing ganglionic nerve cells, III, 44.
- Florey, H. W., and Jennings, M. A., secretion of the colon of the cat, III, 388.
- Jennings, M. A., Florey, H. W., and Lium, R., intestinal secretion, III, 758.
- Wright, R. P. See Mortimer, H.
- Wright, R. W., Stuber, L. S., and Albright, P. S., phenylthiocarbamide-ethyl alcohol and carbamide-methyl alcohol systems and the Debye salting-out theory, I, 192.
- Wright, S., mode of action of oxygen lack on respiration, III, 125.
- See also Schweitzer, A.
- Wright, T. See Vaughan, S. L.
- Wright, T. A. See Lee, G. I.
- Wright, W. D., a visual phenomenon, III, 254. Response of eye to light in relation to measurement of subjective brightness and contrast, III, 838.
- and Granit, R., correlation of sensory and physiological phenomena of vision, III, 753.
- See also Klemperer, O.
- Wright-Smith, R. J., fatal gas poisoning in welding in a closed tank, III, 317.
- Wrinch, D. M., crystal analysis and point sets, I, 64. Structure of proteins, II, 294. Structure of the globular proteins, II, 294. Cyclol theory and the structure of insulin, II, 397. Protein molecule, III, 785. Tuberculin protein TBU-bovine (523), III, 869.
- See also Langmuir, I.
- Wróbel, A., hydrobromides of 3:5-dibromo-*o*- and -*p*-toluidine and 5:6-dibromo-*m*-4-xyldine, II, 500.
- Wróblewski, B. See Weslaw, W.
- Wrzeszinski, G. W. See King, A.
- Wu, C. H. See Tsai, C.
- Wu, C. J., and Sia, R. H. P., β -haemolytic streptococcus. II. Serological types isolated from scarlet-fever patients and their contacts, III, 527.

- Wu, H. See Liu, S. C., and Wang, C. F.
- Wu, K. S., physiology and pharmacology of earthworm gut, III, 1058. Action of drugs, especially acetylcholine, on annelid body wall (*Lumbricus*, *Arenicola*), III, 1085.
- Wu, T. Y., and Kiang, A. T., potential function of the acetylene molecule. I, 1, 242.
- Wülfert, K. See Hansen, L.
- Wüllenweber, G. See Maintz, M.
- Wünsche, H. W., sternal puncture and bone marrow studies, III, 741.
- Wünsche, O., blood group and hæmolysis by streptococci, III, 206.
- Wüst, K. See Andress, K. R.
- Wüstefeld, A. See Vogel, R.
- Wuhrmann, K. See Frey-Wyssling, A.
- Wuis, P. J., and Mulder, D., diarylmethane derivatives. IV. Properties of di-naphthylmethyl radical and ion, II, 103.
- Wulf, O. R., and Deming, (Mrs.) L. S., partial analysis of infra-red absorption spectra of organic molecules in dilute solution, I, 8.
- and Melvin, E. H., band spectra in nitrogen at atmospheric pressure; source of band spectra excitation, I, 289.
- Wulf, J. See Elliott, R. M.
- Wulf, P., development of laboratory technique, I, 223.
- Wulle, H., micro-determination of fluorine in blood, III, 963.
- Wunsch, D. S., trace elements in livestock diseases, III, 765.
- Wurm, K., interpretation of molecular spectra and study of molecular spectra in celestial objects. XI. Interpretation of the spectra of comets and their forms, I, 354.
- See also Struve, O., and Uhlenhuth, P.
- Wurmser, L. See Hazard, R.
- Wurzschmitt, B., possible analytical applications of apparatus for technical determination of sulphur and halogens described by Grote and Krekeler and in D.R.P. 642,166, I, 161.
- and Zimmermann, W., possible analytical uses of the apparatus of Grote and Krekeler and of that described in the D.R.P. 642,166 of the I.G. Farbenindustrie in chemical technology, especially for the determination of halogens, sulphur, and other volatile elements, II, 43.
- Wusche, H. W., relation of mastication to gastric secretion, III, 985.
- Wustmann, O., causation of hydrocephalus after removal of a subarachnoid sacral meningocele, III, 673.
- Wuyts, H., and Duquesne, (Mlle.) A., action of borie esters in hydroxyl derivatives, II, 360.
- and Lacourt, (Mlle.) A. L., condensation of formaldehyde with thioarylhiazines, II, 452. Oxidizability of thioarylhiazides to disulphides, II, 505.
- and Vandervelden, F., preparation of tetramethylglucothiodiazolines, II, 40.
- Wyart, J., leucite, I, 287.
- and Chatelain, P., crystallographic study of christianite, I, 48.
- See also Michel-Levy, A.
- Wyatt, B. W. See Allen, B. B.
- Wyburn, G. M., formation of the umbilical cord and the umbilical region of the anterior abdominal wall, III, 346.
- Wyckoff, R. W. G., ultracentrifugal analysis of latent mosaic virus protein [of potato], III, 785.
- See also Beck, C. E., and Biscoe, J.
- Wyatt, T. C., Cooper, M. B., and Groat, W. A., erythrophagocytosis in anæmia of the newborn, III, 1030.
- Wyatt, W. R., evidence of another factor in [vitamin-]B complex for rats, III, 921.
- Wyczaikowska, W., catalytic properties of sulphuric acid and sulphates. I. Hydrolysis of ethyl acetate in presence of sulphuric acid, I, 423.
- Wygant, T. M. See May, E. W.
- Wyk, A. J. A. van der. See Misch, L.
- Wylie, H. B. See Savage, J. E.
- Wyman, J., jun., free rotation in complex dipolar ions in solution, I, 126.
- Analysis of the titration data of oxy-hæmoglobin of the horse by a thermal method, III, 320. Heat of oxygenation of hæmoglobin, III, 551.
- See also Greenstein, J. P., and Porter, E. F.
- Wynn, W. See Bachmann, G., and Haldi, J.
- Wynn-Williams, C. E. See Fertel, G. E. F.
- Wynne, A. M. See Rabinowitch, L.
- Wynne-Jones, W. F. K., and Salomon, G., dissociation constants of piperidine and its homologues, I, 25.
- See also Everett, D. H.
- Wyss, O., Burris, R. H., and Wilson, P. W., occurrence and significance of oxalacetic acid in plant tissues, III, 1019.
- Wyss-Chodat, F., and Chodat, F., effect of vitamin-C on enzymic oxidation of a monophenol, II, 502.
- and Paillard, R., new reaction of sulphonamides; *p*-cresol-tyrosinase reagent, II, 500. Identification of sulphonamides in blood and urine by the *p*-cresol-tyrosinase reaction, III, 1113.

X.

- Xenofontov, A., Proskurnin, M., and Gorodetzkaia, A., capacity of the mercury electrode in solutions of capillary-active substances, I, 202.
- Xicluna, R. See Raynaud, R.

Y.

- Yablunsky, H. L. See Gilman, H.
- Yabuta, T., and Hayashi, "bakanac" fungus of rice. II. Isolation of "gibberellin," the active principle causing slender growth of rice seedlings. III. Physiological action of gibberellin on plants, III, 627, 732.
- Yacoubyan, K. V., separation of the isotypes of chlorine by electrolysis, I, 479.
- See also Dutoit, P.
- Yadoff, O. See Metalnikoff, S.
- Yaglou, C. P., heated thermometer anemometer, I, 45.
- Yaguda, A., and Rosenthal, N., relation of trauma to leukaemia, III, 647.
- Yakimach, A. See Metalnikoff, S.
- Yale, W. D. See Sage, B. H.
- Yamada, H., influence of copper on cultivated tissue, III, 154.
- Yamada, K., and Hasebe, N., flavinduline derivatives. IX., II, 37.
- and Ikoma, I., flavinduline derivatives. X., II, 522.
- Yamada, M. See Nakamura, H.

- Yamada, P. M. See Manville, I. A.
- Yamada, R. See Kasahara, S.
- Yamada, T., induction of secondary embryos in *Petromyzon*, III, 346.
- Yamafuji, K., Nishioeda, N., and Imagawa, H., mechanism of photochemical production of hydrogen peroxide, I, 530.
- and Ohtsu, K., substance in sugar cane which promotes fermentation, III, 790.
- So, K., and Tin, H., photochemical autoxidation and biological decomposition of water, III, 622.
- and Yoshida, Tadashi, micro-determination of sugar with α -naphthol, II, 351.
- See also Ohtsu, K.
- Yamaga, T., influence of muscle-cell surface electrolytes on the rheobase, III, 463.
- Influence of non-electrolytes on membrane potential in toad nerve and muscle, III, 463.
- Influence of nerve-cell surface electrolytes on the rheobase, III, 463.
- Potassium and aluminium migration in the toad sartorius muscle, III, 463.
- Electrotonus and potassium migration, III, 463.
- Yamagami, K. See Kawai, S.
- Yamagata, S., biological reduction. I. Nitrate-reductase of *B. coli*, III, 97.
- and Nakamura, H., hydrogenase; mechanism of bacterial oxyhydrogen gas reaction, III, 97.
- Yamaha, G., variation of p_H in dividing pollen mother cells, III, 213.
- Yamamoto, H., influence of sodium chloride on tissue respiration *in vitro*, III, 556.
- Influence of hydrogen, magnesium, and phosphate ions on tissue respiration *in vitro*, III, 606.
- Influence of constituents of serum on gas metabolism of tissue *in vitro*, III, 654.
- Influence of amino-acids on tissue respiration *in vitro*, III, 706.
- Influence of urea, creatine, taurine, and viscosity on tissue respiration *in vitro*, III, 770.
- Yamamoto, K., effect of disinfectants on receptors of mouse typhus bacilli. IV., III, 433.
- Yamamoto, R., Ishii, Minoru, and Ito, Hiroshi, carotenoids of palm oil (*Elaeis guineensis*, Jack); lycopene in fruit of *Seafortia elegans*, R.Br., III, 884.
- Yamamoto, S., Okazaki, M., and Mukasa, H., results of cardiazol treatment of schizophrenia, III, 832.
- Yamamoto, Singo, changes of tissue-protein and its colloid osmotic pressure under various conditions. (1) Hypnotics. (2) Starvation, III, 554.
- Yamamoto, T., growth of crystals. IX. Relation between concentration of cations added to solution and their amount in the crystal formed, I, 253.
- Influence of cations in aqueous solution on the growth of crystals, I, 331.
- Yamamoto, Y., passivity of iron and steel in nitric acid solution. XXIII.—XXVI., I, 29, 267, 268, 315.
- Electrode potentials of metals and alloys in ferric nitrate solution, I, 374.
- Electrode potential of metals and alloys in sodium nitrate solution, I, 374.
- Yamamura, Z. See Kawasaki, T.
- Yamanaka, T. See Hauss, W., and Isac, C.
- Yamane, J., artificial insemination in Japan, III, 590.
- Yamanouti, Y., pharmacological action of camphor and related drugs, III, 412.

- Yamano, Y., influence of various endocrine disturbances on action of the gonadotropic hormone of anterior lobe of pituitary. I. Relation between gonadotropic hormone and thyroid. II. Relation between gonadotropic hormone and dysfunction of adrenal, III, 1045.
- Yamasaki, F. See Sinma, K.
- Yamasaki, I., flavins produced during fermentation by acetone-butyl alcohol bacteria. I. Flavin from rice, III, 524.
- Yamasaki, K., and Takahashi, Kyutaro, action of concentrated hydrochloric acid on chenodeoxycholic acid, II, 21. See also Hatakeyama, T.
- Yamashita, H., Mori, K., and Miwa, M., effect of α -, γ -, and β -rays on fertilised eggs of sea-urchins, III, 684. See also Miwa, M.
- Yamashita, S., experimental investigation of susceptibility to cancer. I. Analysis of factors concerned in the production of cancer, III, 70.
- Yamashita, Y. See Sasaki, Shuiku.
- Yanagisawa, J. See Sugawara, S.
- Yanagisawa, K., and Sugai, T., effect of compounds containing the sulphhydryl group on experimental tuberculosis in guinea-pigs. I. Sodium thiosalicylate and its derivatives, III, 82. and Tscizuki, M., influence of tuberculosis on the reduced glutathione and ascorbic acid contents of the various organs in guinea-pigs, III, 290.
- Yanagita, M., synthesis of products of the decomposition of dihydrous acid, See also Asahina, Y.
- Yanai, M. See Ochiai, E.
- Yang, C. T. See Tseou, H. F.
- Yannet, H., effect of prolonged insulin hypoglycemia on distribution of water and electrolytes in brain and muscle, III, 976.
- Yanovsky, E., and Kingsbury, R. M., analyses of [North American] Indian food plants, III, 216.
- Yanowitz, M. See Wakerlin, G. E.
- Yanorski, L. K., and Hynes, W. A., application of salts of complex cations to the microscopic detection of anions. VIII. 1:2-Chloroquatertramminocobaltic chloride, I, 534. See also Hynes, W. A.
- Yaoi, H., combined active immunisation against smallpox and typhoid fever. I. Experimental studies, III, 1105. and Arakawa, S., protective substance for the preservation of vaccine virus, III, 335.
- Hirose, S., and Suzuki, Y., combined active immunisation against smallpox and typhoid fever. II. Clinical studies, III, 1105.
- Yarbrough, M., and Satterfield, G. H., acidity and vitamin-C content of tomatoes, III, 995.
- Yarnall, W. A., and Wallis, E. S., synthesis of substituted alicyclic methyl ketones. I. II. Hydroxymethyl ketones, II, 428, 430.
- Yarwood, C. E., effect of boron nutrition on susceptibility of plants to powdery mildew, III, 438.
- Yasaki, See Nishina, Y.
- Yaskin, J. C. See Alpers, B. J.
- Yasuda, Y. See Somiya, T.
- Yasue, M., and Sasaki, Toyosaku, isolation of monotropitoside from *Gaultheria cumingiana*, Vidal, II, 409.
- Yasuna, E. See De Graff, A. C.
- Yates, A. B., the Sudbury intrusive, I, 110.
- Yates, A. L. See CoTui, F. W.
- Yates, E. L., separation of isotopes for investigation of nuclear transmutations, I, 44.
- Yeh, H. L. See Kung, L. C.
- Yeh, K. S. See Guy, R. A.
- Yerger, E. S. See Hopkins, R. N.
- Yerushalmy, J. See Gardiner, E. M.
- Yesinick, L. See Libet, B.
- Yetter, E. W., linear coefficient of thermal expansion of ambroid, I, 339.
- Yi, C. L., reflex sympatho-inhibitory centre in the medulla oblongata, III, 466.
- Yi, C. S. See Zé, N. T.
- Yntema, L. F., and Fleming, T., volumetric oxidation of iodide to iodate by sodium chlorite, I, 486.
- Yoda, Y. See Nakamura, H.
- Yoe, J. H., and Boyd, G. R., jun., patent-blue V as a p_H and redox indicator, I, 577. and Overholser, L. G., colorimetric determination of palladium with *p*-nitrosodiphenylamine, I, 537.
- Yoffey, J. M., and Drinker, C. K., lymphatic pathway from the nose and pharynx; absorption of dyes, III, 15.
- Sullivan, E. R., and Drinker, C. K., lymphatic pathway from the nose and pharynx, III, 460.
- Yokoyama, E., effects of pituitrin, pitocin, and pitressin on nitrogenous substances in blood of normal and hypophysectomised dogs, III, 1048.
- Yokoyama, H., influence of yohimbine and quinine on glycogen mobilisation in the toad liver produced by electric stimulation of the splanchnics, III, 299.
- Yokoyama, M., condensation products of acetylisation acid, II, 85. Condensation products of isatin, II, 85. and Kotake, M., catalytic action of selenium on unsaturated compounds, II, 4.
- Yokoyama, Tadao, circulation of blood in the silkworm, III, 654.
- Yokoyama, Tuneko. See Masayama, T.
- Yokoyama, Y. See Takahashi, Teizo.
- Yonkman, F. F. See Chase, H. F.
- Yoshida, Tadamitu, and Yoshimura, M., influence of drugs on combined action of acetylcholine and eserine, III, 612.
- Yoshida, Tadashi. See Yamafuji, K.
- Yoshida, Tetuo, pigment-excreting function of liver in experimental disturbances of pancreas, III, 1059.
- Yoshii, N., heat production of pancreas. V. Distribution of secretory fibres of pancreatic nerves, III, 483.
- Yoshikawa, K., and Hanai, S., hydrogenation of saccharides. II, II, 245. See also Kubo, H.
- Yoshimoto, S. See Asada, T.
- Yoshimura, F. See Kawai, S.
- Yoshimura, K., existence of nitrogen compounds, especially spermine, in newly hatched chickens, III, 156.
- Yoshimura, M. See Yoshida, Tadamitu.
- Yoshimura, S., dissolved oxygen of the lake waters of Japan, I, 107.
- Yoshino, K., change of Arakawa's reaction and of inorganic sulphate content of human milk on antileptic treatment, III, 696.
- Yoshio, K., influence of nutrition on adrenalineaction. III. Potassium:calcium ratio in blood, III, 599.
- Yosiki, S. See Kuwada, S.
- Yositake, M., biochemistry of carbohydrates. XLVIII. Determination of free sugar in presence of amino-sugar in blood, III, 1062.
- Yosizumi, Z., blood-lactic acid in patients with pulmonary tuberculosis and its increase after work, III, 652. See also Katsura, S.
- Yost, D. M., Raman spectra of volatile fluorides; applications of Raman spectra to chemical problems, I, 120. See also Beeson, C. M., and Cooley, R. A.
- Yost, F. L. See James, H. M.
- Yost, M. See Meyer, A. E.
- Youd, F. R. See Stacey, M.
- Youmans, W. B., and Waisman, R. C., effect of β -methylcholneurathane on normal and on reflexly inhibited intestine, III, 311.
- Young, A. G. See Chase, H. F.
- Young, A. M., Applebaum, H. S., and Wasserman, P. B., lipoid pneumonia, III, 854.
- Young, A. P. See Weisberger, D.
- Young, F. E. See Smith, E. Lester.
- Young, F. G., anterior pituitary and carbohydrate metabolism, III, 1047. Waters, E. T., Markowitz, J., and Best, C. H., effect of administration of some carbohydrate derivatives on hypoglycemic symptoms of hepatectomised dogs, III, 300. See also Folley, S. J., Newton, W. H., and Rowlands, I. W.
- Young, G., shape and stability of heavy nuclei, I, 400. Theory of diffusion forces in metabolising systems, III, 393.
- Young, G. A. See Young, R. H.
- Young, G. H., determination of organic sulphur, II, 132. Schneider, W. K., and Aston, J. G., orientation of high mol. wt. linear polymerides in unstretched films, I, 13.
- Young, G. T. See Campbell, W. G., and Hirst, E. L.
- Young, H. A., and Young, M. B., oxidation of ethyl disulphide by hypobromite ion; rate of the reaction, I, 527.
- Young, H. H., jun., and Black, H. C., reversibility of the reaction between triglycerides and glycerol, II, 4.
- Young, H. Y. See Sideris, C. P.
- Young, J. See Smith, S. W. J.
- Young, J. W., *s*-diphenylguanidine as an acidimetric standard, I, 533.
- Young, J. Z., partial degeneration of nerve supply of the adrenal, III, 1039. See also Pumphrey, R. J.
- Young, L., detoxication of carbocyclic compounds, III, 998.
- Young, M. B. See Young, H. A.
- Young, M. H. C. See Dornman, C. B. B.
- Young, R. C., Goodman, C., and Kovitz, J., vapour pressure of thorium acetylacetonate by radioactivity measurements, I, 311.
- Young, R. H., and Young, G. A., treatment of the psychoses with induced hypoglycemia and convulsions, III, 572.
- Young, T. O., chronic hyperthyroidism. II. Diffuse toxic goitre, III, 679.
- Young, W. A., idiosyncrasy to acriflavine, III, 1091.
- Young, W. C., Dempsey, E. W., Myers, H. I., and Hagquist, C. W., ovarian condition and sexual behaviour in the female guinea-pig, III, 584.
- Young, W. G., Bailou, G., and Nezak, K., allylic rearrangements. VIII. Action of magnesium on cinnamyl chloride, II, 132.

- Young, W. G., Nozaki, K., and Warner, (Miss) R., interconversion of crotyl alcohol and methylvinylcarbinol in aqueous sulphuric acid, II, 491.
- Pressman, D., and Coryell, C. D., stereoisomerism of unsaturated compounds. IV. Identification of *cis-trans* isomerides by rate studies, II, 399.
- See also Winstein, S.
- Young, W. S., and Krase, N. W., properties of explosive gas mixtures. I. Hydrogen-air and ethylene-air systems, I, 476.
- Youtz, J. P., device to protect large vacuum systems against accidental interruptions of the mechanical pump, I, 106.
- Youtz, R. E. P., and Stevens, S. S., pitch of frequency modulated tones, III, 135.
- Yu, T. F. See Chu, H. I., and Snapper, I.
- Yu, W. Y. See Chi, Y. F.
- Yu-Dschau, L. See Heubner, W.
- Yuasa, band spectrum of aluminium fluoride AlF, I, 118.
- Yuasa, Y., colour reaction of histidine in urine of normal and pregnant women, III, 987.
- Yudkin, A. M., vitamin-A with special reference to therapy, III, 850.
- Yudkin, J., beri-beri in London, III, 287.
- Yuge, A. See Kubo, M.
- Yuile, C. L., primary reticulum cell sarcoma of the brain; relationship of microglia cells to histiocytes, III, 28.
- Yuin, K. H. See Sah, P. P. T.
- Yukawa, H., and Miyagawa, Y., disintegration of the nucleus by neutron impact, I, 232.
- and Sakata, S., mass and mean life-time of the meson, I, 400.
- Yuki, K., fructose tolerance in various forms of psychoses, III, 925.
- Yun, I. S., Choi, S. C., Ryang, W. T., and Kim, S. S., Shope's virus papilloma in rabbits, III, 69.
- Yvon, J., radius of the electron, I, 168.
- Z.**
- Zabeshinski, J. L. See Shuchovitzki, A. A.
- Zabor, J. W. See Matheson, M. S.
- Zacharevski, V. A., methyl-red as an indicator in titration of fluorides by thorium salts, I, 38. Simple appliance for exact regulation of constancy of temperature of nichrome ovens, I, 42. Automat for mercury distillation, I, 45.
- Zacharias, J. R. See Kellogg, J. M. B., and Rabi, I. I.
- Zacharova, N. A. See Korf, D. M.
- Zachawski, J. See Zipf, K.
- Zachoval, H., dispersion of ultrasonic waves in castor oil, I, 189. Ultrasonic dispersion in liquids, I, 555.
- Zachrisson, C. G. See Liljestränd, G.
- Zadina, R. See Schovanec, B.
- Zadkevič, C. See Dolejšek, V.
- Zadmard, H., colloid-chemical properties of humus, I, 258.
- Zaeper, G., responses to anoxia, III, 899.
- Habisch, L., Cranefod, A., and Wolf, W., response to exercise as test of circulatory efficiency, III, 558.
- Zaeslin, H. See Rugli, P.
- Zaffke, K. H., hemeralopia in thyrotoxicosis and diseases of the liver, III, 472. Normal dark-adaptation curves by light threshold method measured with Birch-Hirschfeld photometer, III, 674.
- Zagala, P. See Dziewonski, K.
- Zagami, V., p_H of human seminal fluid at different temperatures and dilutions, III, 52. p_H of dog's seminal fluid, III, 142. Osmotic pressure, electrical conductivity, and p_H of seminal fluid of man and dog, III, 142. Antineuritic vitamin-B₁ content of oil-bearing seeds, III, 236. Seminal fluid. VII. Electrical conductivity as a function of temperature, III, 386. p_H of seminal fluid of rabbit, III, 386. Role of the vagi in carbohydrate metabolism. II. Effect of insulin on heart, liver, and muscle-glycogen of vagotomised pigeons, III, 477.
- and Di Stefano, G., p_H of human parotid saliva, III, 688.
- Zagor, H. I. See Salant, E. O.
- Zagvozdin, K. I., heat of vaporisation of water at 80° from aqueous phosphoric acid of various concentrations, I, 324.
- Zahl, P. A., Haskins, C. P., Gallagher, D. M., and Buchwald, C. E., electrical properties of deposited layers of calcium stearate, I, 139.
- Koller, L. R., and Haskins, C. P., effects of ultra-violet radiation on spores of *Aspergillus niger*, III, 1098.
- Zahler, H., and Litzka, G., clinical experiments with synthetic corticosterone, III, 580.
- See also Rössle, R.
- Zahorka, A. See Skrabal, A.
- Zahorsky, J., protein requirements of infants, III, 849.
- Zaidel, A. See under Seidel, A.
- Zaimovski, A. S., and Erachtin, V. A., oven for determination of resistance of heated wire, I, 103.
- Zain, H., seasonal variation of sensitivity to magnesium and phosphatide content of frog's heart, III, 964. Effect of castration and follicular hormone on hyperthyroidism in rats, III, 974.
- Zajic, E. See Kerschbaum, E.
- Zakomorny, M. See Chrzaszcz, T.
- Zakotin, N. N. See Petrov, A. D.
- Zakrzewski, Z., tumour immunity, III, 279. Tumour production by embryonic pulp derived from tumour-bearing animals, III, 280. Effect of narcosis on tumour growth, tumour resistance, and immunity, III, 280.
- Zalasskaja, T. E., catalytic transformations of ketones; isomerisation of phenyl *sec*-butyl ketone, II, 266.
- Zalla, A., subsequent effect of application of prisms on evaluation of the apparent optical vertical, III, 37.
- Zambotti, V., chemical and physico-chemical basis of the colorimetric micro-determination of phosphoric acid by means of molybdenum-blue. I. Determination of the phosphoric ion, I, 215.
- Zamenhof, S., sensitive temperature and pressure measurement, I, 158, 339. Production of extremely low temperatures, I, 159. High vacua for obtaining low temperatures, I, 159.
- Zamlynski, T., influence of temperature on absorption spectrum of cadmium vapour, I, 50.
- Zancan, L., sodium bismuth pyrocatechol-disulphonate. I. Pharmacology. II. Chemotherapy, III, 191, 509.
- Zanden, J. M. van der, polymerisation of ethylchavicol; α -di-*p*-ethoxyphenyl- Δ^6 -hexene, II, 154.
- Zanello, D., reactivity of the schizophrenic organism to sulphur therapy as indicated by Donaggio's reaction, III, 130. Donaggio's reaction and changes in the blood picture following stimulation of the pituitary, III, 470.
- Zanetti, E., and Bashour, J. T., 2-furfuryl bromide, II, 518.
- Zanichelli, A. See Littardi, A.
- Zanko, A. M. See Stefanovski, V. F.
- Zanotti, V., effect of the pyrrole nucleus on chlorophyll formation, III, 108.
- Zanten, P. G. van. See Coster, D.
- Zanzucchi, G., relationship between pupil and neck reflexes, III, 129. Changes in the pupil during labyrinthine heat stimuli, III, 134. Variations in the pupil of the eye during rotation, III, 835. Reaction of the pupil of the eye to galvanic stimuli through the head, III, 835. Acoustic reflexes of dog, III, 972.
- Zapf, G. See Sieverts, A.
- Zapfe, C. A. See Hultgren, R.
- Zapiór, B., dielectric potential of esters, I, 262. Dielectric potential and surface tension of certain physiologically active compounds, I, 415.
- Zaporoshetz, A. V. See Volkova, Z. V.
- Zapp, J. A., jun., and Wilson, D. W., carnosine and anserine in mammalian muscle. I. Determination of carnosine and anserine. II. Distribution of carnosine and anserine in various muscles of different species, III, 26.
- Zappi, E. V., and Manini, A., new general reagent for enols; mercurous nitrate. IV. Interpretation of the reaction mechanism, II, 133.
- See also De Degiorgi, (Mme.) A. C.
- Zapponi, P. P. See Haring, M. M.
- Zárday, I. V., extracardiac causes of heart-block, III, 17.
- Zaretzki, E. M., and Akimov, G. V., corrosion of copper in aqueous ammonium salts. I. Mechanism of corrosion, I, 209.
- Zaretzki, S. A. See Shivotinski, P. B.
- Zarinš, E., and Ozoliņš, J., salt and phosphate content, temperature, surface currents, and wind direction in the Irbes Channel, determined by the lightship "Laima," I, 584.
- and Putnina, C., vitamin-C content of the fruits of different varieties of hip and other plants, III, 1072.
- Zaslavski, I. I., molecular volumes in crystallo-chemistry, I, 303. Polarisering properties of ions in aqueous solutions, I, 606.
- Zaunbauer, B. See Lindner, J.
- Zavelsky, A., upper limit of the β -spectrum of Th-C' and Th-B, I, 171.
- Zaverina, E., sorptive properties and character of porosity of active charcoal obtained from sugar by the method of inorganic additions, I, 72.
- and Dubinin, M., changes in sorptive properties of activated carbons with time, I, 414. Effect of surface oxides on the sorptive properties of activated charcoal towards vapours, I, 561.
- See also Dubinin, M.
- Zavojski, E. K., and Salichov, S. G., relations between certain properties of gases and vapours, in connexion with absorption by them of high-frequency electrical fields, I, 405.
- Zawadzki, B., action of allyl formate on frog muscle, III, 25. Anodal localisation of recovery following reverse polarisation in directly stimulated frog's muscle, III, 565.

- Zawadzki, J., Ostroch, S., and Kwiecinski, G., reduction of sulphur dioxide by methane, I, 333.
- Zaytzeff-Jern, H., and Meleney, F. L., effect on bacteriophage of prontosil, prontosil, sulphapyridine, and other antiseptics and dyes used in surgical practice, III, 928.
- Zazeela, H. See Abramson, D. I.
- Zdanovski, A. B., relation between the properties of mixed and single solutions. I. Heat capacity of mixed solutions. III. Heat capacity and density of solutions in the system $\text{NaCl} + \text{KNO}_3 = \text{NaNO}_3 + \text{KCl}$, I, 68, 250.
- and Matzenok, B. A., relation between the properties of mixed and single solutions. II. Heat capacity of mixed solutions of the $\text{NaCl-MgCl}_2\text{-H}_2\text{O}$ system at 25° , I, 68.
- and Susliha, K. D., relations between the properties of mixed and single solutions. IV. Heat capacity of aqueous solution of salts in the system $\text{MgSO}_4 + 2\text{NaCl} = \text{MgCl}_2 + \text{Na}_2\text{SO}_4$ at 25° , I, 250.
- See also Blumberg, J. B.
- Zé, N. T., and Vi, C. S., pressure shifts of the high terms of the absorption series of Na, Rb, and Cs produced by hydrogen and nitrogen, I, 111.
- Zechmeister, L., and Tóth, G., chromatographic analysis of chitinase, III, 722.
- and Tuzson, P., reversible isomerisation of carotenoids by iodine catalysis, II, 473.
- Zechner, L. See Draths Schmidt, K.
- Zeckwer, I. T., difference between castration cells and thyroidectomy cells of the pituitary of the rat in response to the administration of oestrone and thyroid extract, III, 137.
- Zeghauser, A., and Falik, E., water and salt metabolism in affections of the central nervous system, III, 130.
- Zehn, hormonal treatment of prostatic hypertrophy with testosterone propionate, III, 51.
- Zeiger, K., physikochemische Grundlagen der histologischen Methodik [physicochemical bases of histological methods], III, 640.
- Zeijlemaker, F. C. J., carboxylase and cocarboxylase in germinating *Avena*, III, 533.
- Zeile, K., and Fawaz, G., synthesis of natural creatinephosphoric acid, II, 53.
- and Meyer, Hilegard, synthesis of creatinephosphoric acid, II, 11.
- Zeise, H., adsorption of gases from very low to very high pressures, I, 72. Calculating combustion temperatures and its application to mixtures of alcohol vapour, water vapour, and oxygen; calculation of enthalpy, entropy, heat capacity, and reduced thermodynamic potential of ethyl alcohol vapour, I, 420.
- Zeit, W. See Carey, E. J.
- Zeiter, W. J., tularemia treated with artificial fever therapy, III, 1081.
- Zeldovitch, J. B., proof that the mass law equations have only one solution, I, 79.
- Theory of reactions on porous or powdered materials, I, 571.
- and Frank-Kamenetzki, D. A., theory of thermal propagation of flame, I, 202.
- Zelenin, V. F., electrocardiography as a method of diagnosis of disturbances of cardiac function, III, 455.
- Zell, F. See Fenz, E.
- Zeller, A., simple photo-electric colorimeter, I, 389. Determination of 0.3–50 mg. of glucose by the method of Hagedorn and Jensen, III, 221. Nutrient solution for physiological regeneration of microorganisms, III, 337.
- Zeller, E. A., enzymic degradation of polyamines. III. Diamino-oxidase, III, 197.
- and Schar, B., therapeutic use of histaminase, III, 322.
- Schar, B., and Staehlin, S., enzymic degradation of polyamines. IV. Diamineoxidase (histaminase), III, 871.
- Zellhoefer, G. F. See Copley, M. J.
- Zelmanov, J. L., liquefaction of helium by means of the Joule-Thomson effect, I, 189, 339.
- Zelson, C., treatment of cryptorchidism with gonadotropic substance, III, 688.
- Zelvenski, J. D., solubilities of components of gas mixtures in liquids under pressure, I, 560.
- Zemiatchenski, P. A., origin of kaolin, I, 288.
- Zemplén, G., and Bognár, R., action of mercury salts on acetohalogeno-sugars. XII. Advantageous synthesis of primverose derivatives and of primverose. XIII. Synthesis of isoprimverose [6-*a-d*-xylosido-*d*-glucose], the *a*-isomeride of primverose, and their derivatives, II, 99, 358. Synthesis of ruberythric acid, the main alkaloid of madder, II, 246.
- and Gerecs, A., preparation of rutinose from rutin without aid of enzymes, II, 50.
- and Tettamanti, A. K., bioses of hesperidin and of neohesperidin, II, 50.
- Zener, C. See Randall, R. H.
- Zentner, H. See Pauli, W.
- Zentner, R. See Hermann, S.
- Zentner, M. See Ortnier, G.
- Zephrioff, P. See Dobrovolskaia-Zavadskaja, N.
- Zerbini, C. V., and Ghibaudo, A. J., trypanred in the kidney function test of Yasienki, III, 987.
- Zerfas, L. G. See Dixon, M.
- Zernike, F., phase theory and allotropy, I, 460.
- Zernike, J., is there an essential difference between "ordinary" and "complex" compounds. II. and III., I, 79, 128.
- Zernoff, V., and Ajolo, J., effect of *p*-aminobenzenesulphonamide (1162 F.) on experimental infection in *Galleria mellonella*, III, 927. Chemotherapy in insects; *p*-aminobenzenesulphonamide (1162 F.) in vaccination of *Galleria mellonella*, III, 1093.
- Żeromski, S., and Szamborska, W., application of X-radiography to study of the systems $A_{\text{solid}} = B_{\text{solid}} + C_{\text{gas}}$, I, 263.
- Zerrahn-Wolf, G. See Crozier, W. J.
- Zervas, L., new method of phosphorylation; 1-glucosylphosphate, II, 360.
- Zetlin, A. M. See Banus, M. G.
- Zettel, H., and Fink, A., effects of exercise in a gas mask on the heart, III, 655.
- Zetzsche, F., and Fredrich, A., carbodiimide, II, 151.
- and Röttger, G., recognition of carbonylic acids as ureides with aid of carbodiimides. IV. Detection of α -substituted acids, II, 467.
- Zeuner, H., pathogenic anaerobic bacillus isolated from cases of food poisoning, III, 874.
- Zeus, L., influence of thyrotropic hormone on the heart, III, 559.
- Zeusler, F. A. See Barnes, C. A.
- Zewi, M., regeneration of visual purple, III, 836.
- See also Granit, R.
- Zeziulinski, V. M., and Tumanski, S. S., dispersion of indanthrene dyes in a supersonic field, I, 78.
- Zide, H. A., does compensatory hypertrophy of the adult human testis occur? III, 52.
- Ziegler, E. See Hanus, F., and Zinke, A.
- Ziegler, G. E. See Hoffman, E. J.
- Ziegler, L. H., and Cash, P. T., influence of emotions and effects on the surface temperature of the human body, III, 247, 668.
- Ziegler, M. R., and McQuarrie, I., phloridzin glycosuria and hypoglycaemia unaffected by excess ingestion of sodium and potassium salts, III, 174. Mechanism of insulin convulsions. I. Serum-electrolytes and blood-sugar in relation to occurrence of convulsions. II. Effects of varying partial pressures of atmospheric oxygen, nitrogen, and carbon dioxide, III, 380.
- Ziegler, N. R., late lactose-fermenting organisms of the *coli-aerogenes* group, III, 629.
- Ziegler, W. M. See Schaffer, N. K.
- Zielinski, F. See Sym, E. A.
- Zielinski, J., spark gap, I, 389.
- Ziemecki, S., ionisation in the troposphere, I, 440.
- See also Szczeniowski, S.
- Ziemitzsch, W., hypertension and renal function in congenital cystic kidneys, III, 596.
- Zienty, F. B. See Blicke, F. F.
- Zies, E. G., concentration of the less familiar elements through igneous and related activity, I, 226.
- Zietschmann, O., dorsal mesogastrium of dog, III, 805.
- Ziff, M. See Renshaw, R. R.
- Ziffer, R. See Neuberg, C.
- Ziffren, S. E. See Owen, C. A.
- Zih, A., effect of bile pigments and haemoglobin on the red cell count in man, III, 351. Effect of oral administration of spleen and liver on blood count of dogs with gall-bladder fistula anaemia, III, 351. Action of a diet rich in meat and chlorophyll-containing vegetables on red cell count, III, 811.
- Zilberman, D. E. See Shdanov, V. V.
- Zilva, S. S., Kidd, F., and West, C., ascorbic acid in metabolism of apple fruit, III, 705.
- See also Kellie, A. E., and Snow, G. A.
- Zima, O. See Möller, E. F.
- Zimens, K. E. See Flügge, S.
- Zimin, A., and Bach, N., electrochemistry of platinum sols. IV. Particle charge of hydrogen platinum sols, I, 610.
- Zimmer, K. G., dosimetry of fast neutrons, III, 717.
- and Timofeev-Ressovski, N. V., biological effects of densely ionising radiation, I, 236. Radiobiology of fast neutrons, III, 717.
- Zimmer, T., dose distribution in near radiation and body cavity valves, III, 717.
- Zimmerman, H. M., histopathology of convulsive disorders in children, III, 130.
- See also Oppen, L.

- Zimmermann, H. W., and Latimer, W. M., heat of reaction of thiosulphate with tri-iodide, I, 473.
See also Latimer, W. M.
- Zimmerman, P. W., and Hitchcock, A. E., response of gladiolus corms to growth-substances, III, 214. Activation of cinnamic acid by ultra-violet light and the physiological activity of its emanations, III, 535.
- Zimmermann, W. See Wurzschmitt, B.
- Zimmermann, Wilhelm, photometric determination of vitamin-C using methylene-blue, III, 291. Starch media as substitute for agar, III, 531.
- Zimmermann-Meinzingen, O. von, angina pectoris, III, 123.
See also Jagić, N. von.
- Zimmet, D., effect of vitamin-C deficiency on seminal fluid of guinea-pig, III, 994.
See also Dainow, I.
- Zingg, E. See Scherrer, P.
- Zinke, A., Hanus, F., and Ziegler, E., hardening process of phenol-formaldehyde resins, II, 209.
- Zinknagel, R., purines of embryo of ringed snake, III, 978.
- Zinn, C. J. See Griffith, J. Q., jun.
- Zinn, W. H., Seely, S., and Cohen, V. W., collision cross-sections for D-D neutrons, I, 504.
and Szilard, L., emission of neutrons by uranium, I, 593.
See also Szilard, L.
- Zinnitz, F., acetylcholine as potential poison of the heart, III, 308. Influence of cholesterol on action of acetylcholine, III, 1002.
- Zinoviev, A., determination of activity of nickel catalysts, I, 529.
- Zintl, E., intermetallic compounds, I, 137.
and Croatto, U., a fluorite lattice with vacant anion places, I, 464.
and Morawietz, W., mixed crystals of cryolite with alumina, I, 137.
and Roessler, Hubert, sodium trisulphate, $\text{Na}_2\text{S}_3\text{O}_{10}$, I, 153.
and Udgård, A., mixed-crystal formation between salt-like fluorides of different formula-type, I, 137.
- Ziperovitch, A., determination of pentosans in wet material and solutions, III, 110, 221.
- Zipf, K., action of veritol, III, 310.
and Zachawski, J., action of cytosine on circulation, III, 183.
- Zipkin, L. See Anderson, A. K.
- Zippel, I. See Lintzel, W.
- Zironi, A. See Martini, E.
- Ziropulos, J. See Andreadis, T.
- Ziskind, J., and Schattenberg, H. J., fatal anaphylactic shock in man, III, 417.
Teratoma of the brain, III, 830.
- Zisman, W. A. See Goranson, R. W.
- Zivy, P. G. See Paraf, J.
- Zlobinskaja, E. J. See Evetzkii, G. N.
- Zlotowski, I., nuclear disintegration induced by cosmic radiation, I, 594.
See also Joliot, F., and Lecoine, M.
- Zmaczynski, A., ebulliometric and tonometric measurements of eight standard liquids, I, 67. Over-pressure in ebulliometers, I, 282.
See also Moser, Helmut.
- Zoccoli, A. G., and Giacchero, R., new reduction test with dichlorophenol-indophenol in skin, III, 852.
- Zocher, H., polarisation of the fluorescence of dyes dissolved in mesophases, I, 124.
- Zoller, A., Putten mine, Willenberg; an old gold working at Roversdorf, near Schonau, on the Katsbach (Lower Silesia), I, 438.
- Zolatkowska, (Mlle.) K. See Centnerszwer, M.
- Zollenkopf, H. See Hintze, H.
- Zollikofer, C., action of oestrons and thyroxine on dormant buds, III, 882.
- Zollner, S. See Lachnit, V.
- Zolotarevskaja, S. See Bruns, B.
- Zolotov, V. S., effect of calcium on reaction of blood vessels to adrenalectomy, III, 238.
- Zoltowski, P. See Atwell, W. J.
- Zon, L., effect of thyroid feeding on removal of cholesterol, III, 680.
- Zondek, B., inactivation of progesterone in the organism, III, 480.
and Marx, L., lipæmia and calcæmia caused by oestrogenic hormone in the cock, III, 383. Lipæmia and calcæmia in the cock induced by diethylstilbæstrol, III, 479.
and Rozin, S., production of uterine hæmorrhage in normal cycle and in amenorrhæa by progesterone, III, 383. Uterine hæmorrhage induced by pregnenolone, III, 686.
and Sulman, F., absorption and titration of androgenic hormone in alcoholic and oily solutions administered percutaneously, III, 1057.
- Sulman, F., and Hochman, A., preparation of concentrated antigonadotropic factor (antiprolan), III, 55. Relationship between inactivated prolân and antiprolan, III, 259. Antigonadotropic factor; quantitative aspects of the prolân-antiprolan reaction, III, 906.
See also Weil, A.
- Zondek, H., retrogression of bipartite hemianopsia under internal therapy, III, 1042.
- Zonis, S., polymerisation of α -vinyl-naphthalene derivatives, II, 307.
- Zook, J., and Sharpless, G. R., vitamin-C nutrition in artificial fever, III, 289.
- Zorin, V., corrosion under a drop, I, 93.
- Zorkin, F. P. See Schlesinger, N. A.
- Zorn, C. M., Muntwyler, E., and Barlow, O. W., effect of barbiturates on oxygen uptake and anaerobic reduction of methylene-blue by rat liver and brain, III, 863.
- Zorn, K. See Felix, K.
- Zorn, O., porphyria and ovarian function, III, 171.
- Zothe, H., strophanthin in disturbances of the peripheral circulation, III, 505. Negative T wave in lead 3 during deep inspiration, III, 655. Vasodilator action of "priscol," III, 776.
- Zotnik, A. See Flaks, J.
- Zotterman, Y., touch, pain, and tickling: electrophysiological investigation on cutaneous sensory nerves, III, 369.
See also Euler, U. S. von.
- Zottner, G. See Velu, H.
- Zucker, L., and Hammett, L. P., mechanism of the acid-catalysed enolisation of acetophenone derivatives, I, 617. Effect of nuclear and side-chain substitution on the oxonium ion catalysed iodination of acetophenone derivatives, I, 617. Kinetics of the iodination of acetophenone in sulphuric and perchloric acid solutions, I, 617.
- Zuckerman, S., water retention in reproductive organs of female monkeys, III, 145.
and Bourne, G., changes in water content of organs and tissues by oestradiol, III, 685.
- Bourne, G., and Lewes, D., cyclical change in the adrenal glands of spayed animals, III, 260.
- and Sandys, O. C., effects of sex hormones on prostate and seminal vesicles of monkeys, III, 1057.
- Wagenen, G. van, and Gardiner, R. H., sexual skin of the rhesus monkey, III, 60.
See also Aykroyd, O. E., Bishop, P. M. F., Clark, W. E. Le G., Folley, S. J., and Palmer, A.
- Zuddas, G., histology of the pineal gland in normal and castrated horses, III, 475.
- Zuhlsdorff, G. See Windaus, A.
- Zuercher, R. A. See O'Brien, S. J.
- Zurrer, T. See Treadwell, W. D.
- Zuger, B. See Steiner, Morris.
- Zugravescu, I., and Zugravescu, (Mme.) S., preparation of styrenes by the action of organo-magnesium compounds on *p*-cyclohexylacetophenone, II, 538.
See also Ionesco, D., and Maxim, N.
- Zugravescu, (Mme.) S. See Zugravescu, I.
- Zuiderweg, F. J. See Hoog, H.
- Zuithoff, A. J. See Jaeger, F. M.
- Zummo, C., liver-fatty acids after administration of ethyl dibromostearate, III, 272. Toxicity of bromo-acids after debromination, III, 416.
- Zumwalt, L. R., and Badger, R. M., structure of the O-H bands in the vapours of halogen-substituted alcohols, I, 119. Absorption band of formaldehyde at 9572 Å., I, 299. N-H harmonic bands of pyrrole at 9900 Å., and the structure of the pyrrole molecule, I, 549.
See also Badger, R. M.
- Zunz, E., and Gillo, L., action of substances modifying blood coagulation on the surface tension and globulin content of the plasma, III, 354.
and La Barre, J., effect of sex hormones on regulation of the blood-sugar, III, 144.
- Sparchez, T., and Gillo, L., effects of hydroxyphenyl- β -methylaminoethanol on water diuresis in the dog, III, 86.
- and Vesselovsky, O., effect of molecular compounds of ergot alkaloids on diuresis; sensibamine, ergotamine, and ergotaminine; ergoclavine, ergosine, and ergosinine, III, 86. Action of ergot preparations on diuresis, III, 86, 311. Effects of choline derivatives on coagulation of blood, III, 89. Effect of ergocristine and ergocristinine on diuresis, III, 185. Effect of various hormones on the glutathione content of the blood. IV. Posterior pituitary extract, III, 554. Action of ergotoxins, ergotinine, and pseudo-ergotinine on diuresis, III, 713. Effect of corynanthine and yohimbine on water diuresis, III, 915.
- Zurrow, H. See Saland, G.
- Zutt, J. See Kncher, J.
- Zvereva, L. A. See Maximov, V. I.
- Zvetkov, V. N., light scattering in anisotropic liquids. I. Investigations in transmitted light. II. Depolarisation of scattered light, I, 180.

- Zvetkov, V. N., size and shape of molecular swarms in anisotropic liquids, I, 599.
 See also Michailov, G. M.
- Zviagintzev, O. E., and Namoradze, Z. G., new reactions for detection of niobium and tantalum, I, 102.
 and Paulsen, I. A., action of minerals on gold solutions, I, 437.
 and Tronev, V. G., oxidation of cupric sulphide and transference of copper into aqueous solution at air pressure, I, 528.
- Volkova, V. A., and Pissarjevskaja, E. L., gold in the Baleisk mine (Transbaikal), I, 345.
- Zwan, A. van der. See Stroer, W. F. H.
- Zwarenstein, H., induction of precocious sexual maturity in immature female mice with amphibian anterior pituitary, III, 1054.
 See also Schrire, V., and Sutherland, M.
- Zwartsenberg, J. W. See Ketelaar, J. A. A.
- Zwecker, I. T., combined thyroidectomy and gonadectomy on compensatory adrenal hypertrophy [and pituitary cytology] in unilaterally adrenalectomised rats, III, 38.
- Zweher, R. L., and Scudder, J., blood-potassium during experimental shock, III, 651.
- Zweibaum, J., vital staining characteristics of fibroblasts, histiocytes, and lymphocytes, III, 348.
- Zwemer, R. L., and Culbertson, J. T., serum-potassium level in *Trypanosoma equiperdum* infection in rats, III, 355.
- Wotton, R. M., and Norkus, M. G., study of cortico-adrenal cells, III, 739.
- Zwicky, F., collapsed neutron stars, I, 176.
 Production of atomic and cosmic rays in supernovæ, I, 506.
- Zwikker, J. J. L., and Kruysse, A., sesquisodium salt of iodoxyhydroxyquinoline-sulphonic acid, II, 36. Determination of iodine in iodoxyhydroxyquinoline-sulphonic acid, II, 44.
- Zworykin, V. K., automatic recording spectroradiometer for cathodoluminescent materials, I, 580.
- Zylberszac, S., pigmentation of liver of female frog in experimental inanition, III, 808.